PROGRESS BOARD

2001 Report

February 14, 2002

This page left blank intentionally.

BC Progress Board
730 – 999 Canada Place
Vancouver BC V6C 3E1
P. 604-775-1664 / F. 604-844-1820
E. ideas@bcprogressboard.com

105-01423/

SUMMARY AND HIGHLIGHTS

This is the first report on the benchmarking mandate of the BC Progress Board. Established in July 2001 and comprised of 15 eminent British Columbians, the Progress Board has two broad mandates:

- To provide advice on whether and to what extent the province is improving its competitive position and quality of life by establishing an ongoing means to measure and benchmark British Columbia's performance over time and relative to other jurisdictions; and,
- To identify issues of importance to the province's future economic prosperity and advise the Premier on strategies, policies and actions necessary to increase the economic and social well-being of British Columbians.

The Progress Board believes that BC has all the necessary ingredients to be an economic and social leader in what United Nations surveys have described as one of the best countries in the world. British Columbia boasts a number of attributes that suggest it is well equipped to be a leading-edge jurisdiction. To name a few: abundant resources; natural beauty; a strategic location between Asia and Europe; excellent access to the dynamic US market; high quality infrastructure; a diverse and multi-cultural society; a skilled and increasingly well-educated workforce; stable institutions; and, the 'rule of law'.

Measurement Framework: Targets and Selected Performance Indicators

To track British Columbia's performance relative to other jurisdictions, the Progress Board has established goals (or targets) and developed a system for measuring BC's progress towards their achievement. The terms of reference for the Progress Board emphasize the need to focus on the economy, since the province's citizens can only enjoy a high quality of life if British Columbia has a growing and competitive economy. To this end, we have identified one overriding economic goal to guide our work going forward: ***Make BC an economic leader in Canada by 2010***. To anchor this objective, the report highlights three more specific targets for ***economic growth***, ***standard of living*** and ***jobs***. On ***economic growth***, the Progress Board believes that BC should aim to be first or second in Canada in expanding real gross domestic product (GDP) per capita by 2010. For ***standard of living***, BC should strive to be first or second in the country in the level of real after-tax (disposable) income per person by 2010. And in the case of ***jobs***, the Progress Board suggests that BC's objective should be to rank first or second among the provinces in the proportion of people aged 15 to 64 who are gainfully employed, also by 2010. Apart from these targets, the report contains an array of indicators designed to shed further light on various aspects of BC's economic progress.

The Progress Board is also mandated to examine how the province is faring in the key areas of the environment, health status, and social condition. Here, we have chosen to highlight one overarching goal: ***Make BC a leader in Canada on environmental quality, health outcomes, and social condition by 2010.*** While many indicators can help to chart progress in these areas, data limitations make it somewhat harder to provide useful inter-provincial comparisons than is the case when assessing economic trends. The report identifies three core targets for measurement: ***environmental quality, life expectancy at birth***, and ***minimizing the number of persons living in low-income circumstances.*** Beyond these three targets, the report includes several other performance indicators selected to offer a more complete picture of BC's quality of life.

The Progress Board's measurement framework relies on "competitive benchmarking" -- a method using the best available cross-jurisdictional data to show how BC has performed compared to other provinces (and, in some cases, US states). Specifically, the report reviews British Columbia's record relative to the other Canadian provinces on six core targets and 20 individual performance indicators. For each target and indicator, information is provided on:

1) BC's absolute ranking among the ten provinces in the most recent year for which data is available (generally 2000);
2) BC's success relative to other provinces in improving performance in the latest year compared to the preceding year (i.e., a one-year ranking); and,
3) BC's success relative to other provinces in improving performance in the past decade, based on the *average annual rate of progress over the period.*

As a supplement to the interprovincial benchmarking that forms the core of the analysis, the report also outlines a series of "topic boxes" intended to shed light on how well BC and three other Canadian provinces (Alberta, Ontario and Quebec) have done in various areas compared to the US states of Washington, Oregon and California. The information on US states is included in Chapters III and IV of the report, immediately following the boxes that summarize the provincial targets and performance indicators. As comparable US data are not always available, information on the American states is only provided for some of the targets/indicators.

All of the data used in the report are as up-to-date as possible. For most of the core economic targets and performance indicators, year 2000 data became available in October 2001. Definitions of the various targets/indicators used in the report can be found in Appendix D. It should be noted that no attempt has been made to offer forecasts for any of the measures included in this report, as this activity is not relevant to the mandate of progress measurement.

Economy, Innovation and Education -- Summary Findings

During the 1990s, it is fair to say that British Columbia fell well short of being a "leading economy" within Canada.

In 2000, BC had the fourth highest level of real gross domestic product (GDP) per capita in the country, ranking behind Alberta, Ontario and Saskatchewan. Over the decade 1991 to 2000, BC's relative position within Canada deteriorated and it stood last among the provinces in increasing real GDP per capita. Stated differently, BC was, on average, the least successful province in expanding the size of the "economic pie" on a per person basis over the decade. In 1991, real GDP per capita in British Columbia was $1,781 above the national average (in 1997 dollars); by 2000, the province had slipped $2,251 below the Canadian average. BC went from having a real GDP per capita $2,951 below that of Alberta at the start of the period (1991) to trailing its neighbour by a full $9,371 ten years later.

In 2000, British Columbia had the third highest level of real personal disposable income per capita in Canada, though this amount still left it $577 below the national average. In 1991, BC boasted the country's second highest real personal disposable income per person, $958 above the national average. Over the decade BC went from being an above-average to a below-average performer within Canada on this basic measure of standard of living. Whereas in 1991 Alberta trailed BC by $268 in real disposable income per person, by 2000 the two provinces' positions had been reversed and Alberta had moved ahead by $1,773.

In 2000, British Columbia ranked fifth among the provinces on the core target for job performance used in this report, the employment-to-population ratio among those aged 15 to 64. In that year, 70.2% of British Columbians in this age group had jobs, versus a nation-wide average of 71.1%. Although all ten provinces saw their employment-to-population ratios climb between 1991 and 2000, on average BC posted the smallest improvement over the period.

A quick review of other performance indicators suggests a number of other factors that may have contributed to BC's slippage in the crucial areas of economic growth, standard of living, and jobs. In 2000 BC ranked a mediocre fifth in Canada in productivity, and it was eighth in raising productivity from 1991 to 2000. On the other hand, over the same period BC saw the second biggest jump in average hourly earnings, and by 2000 it had the second highest hourly earnings in the country. The combination of weak productivity growth and sizable increases in earnings means that unit labour costs in BC have increased more rapidly than in other jurisdictions. Unit labour costs, which combine average hourly earnings and productivity levels into a single indicator, are a common proxy for business cost competitiveness. Unit labour costs in BC are higher than in Alberta, Ontario and Quebec, and the province's overall cost competitiveness has clearly deteriorated vis-à-vis the rest of Canada. All Canadian provinces, including British Columbia, have lower unit labour costs than the US states of Washington, Oregon and California, mainly as a result of the low value of the Canadian dollar compared to its American

counterpart. Without the weakening Canadian dollar, BC's industrial cost competitiveness would have declined relative to US jurisdictions in the 1990s.

By 2000-01, British Columbia had the fourth highest consolidated provincial-local government tax burden on a per person basis, although it ranked third among the provinces in "progress" on this indicator between 1991-92 and 2000-01 – i.e., consolidated provincial-local taxes per person actually rose faster, on average, in seven other provinces. Within Canada, BC stood sixth in fixed business investment as a proportion of GDP in 2000, and it was last in Canada in the growth of the ratio of business investment-to-GDP in the period 1991 to 2000. BC was sixth in the country in research and development spending as a percentage of GDP in 1998, and it also ranked sixth in progress on this important indicator of innovation from 1990 to 1998.

Both BC's relative standing in the most recent year and its progress over the decade were better on several other economic performance indicators included in this report, including top marginal tax rate, taxpayer-supported debt, university completion, and the proportion of the labour force made up of people in natural and applied sciences and related occupations.

BC scores quite well on the measure of university completion used in this report. Among the 25-54 age group, it had the second highest percentage of the population with university completion in 2000, and it ranked second in improvement on this measure over the decade. Another bright spot during the 1990s was the relative strength of BC's fiscal position. Between 1991-92 and 2000-01, BC ranked fourth among the provinces in progress on the deficit (i.e., in improving the fiscal balance in relation to GDP). Also, in 2000 British Columbia had the second lowest taxpayer-supported debt in Canada when calibrated as a share of GDP. However, BC's fiscal position has worsened markedly in the past year or so, with large deficits and an escalating taxpayer supported provincial debt now in store at least through 2004. This suggests that BC's ranking among the provinces on both the deficit to GDP and the debt to GDP ratios is set to decline.

Overarching Goal: Make BC an economic leader in Canada by 2010 as measured by:

- **Economic Growth**: target 1st or 2nd among the provinces in the growth of real GDP per capita by 2010.
- **Standard of Living**: target 1st or 2nd in Canada for the level of real personal disposable income per capita by 2010.
- **Jobs**: target 1st or 2nd in Canada for the employment to population ratio among those aged 15 to 64 by 2010.

Core Target 1: Economic Growth (Growth of Real GDP per Capita) - In 2000, BC ranked fourth among the provinces in level of real GDP per capita. In 2000, it ranked sixth in Canada in the growth of real GDP per capita (3.1%, versus an average of 3.7% for all provinces). Over the ten-year period 1991-2000, BC was last in the country in the growth of real GDP per capita and exhibited the least progress on this basic performance measure.

Core Target 2: Standard of Living (Real Personal Disposable Income per Capita) - In 2000, BC had the third highest level of real personal disposable income per capita in Canada, at $19,029 per person, slightly below the Canadian average of $19,606 per person (1997 dollars). Among the provinces, BC ranked seventh in improvement from 1999 to 2000, and it was the least successful in raising real personal disposable incomes over the 1990s.

Core Target 3: Jobs (Employment to Population Ratio - Age 15 – 64) - In 2000, BC ranked fifth in Canada with an employment to population ratio of 70.2% among those aged 15 to 64, while the national average was 71.1%. Among the provinces, BC was sixth in improving its record between 1999 and 2000. Over the decade 1991 to 2000, BC posted the smallest gains in employment to population ratio in the country on an average annual basis.

Environment Health and Society -- Summary Findings

British Columbia has had a somewhat mixed record on the various measures of environment, health status and social condition covered in this report. In this broad area, the three key target variables chosen by the Progress Board are environmental quality, life expectancy at birth, and low income incidence.

For environmental quality, BC stands first in Canada based on an average of its performance rankings on urban air quality, greenhouse gas emissions per capita, wastewater treatment, and protected areas.

Vancouver, the province's largest metropolitan center, ranked second among seven Canadian cities in 2000 for having the lowest concentrations of particulate matter (PM_{10}), a standard measure of air quality. Vancouver also had the second lowest concentrations of PM_{10} in that year when judged against seven other major North American cities (Toronto, Montreal, Ottawa, Edmonton, Seattle, Portland, and Los Angeles). British Columbia has a relatively good record on emissions of greenhouse gases per person. In 1999, it posted the third lowest level of per capita greenhouse gas emissions in Canada at 15.8 tonnes, almost one-third below the national average of 22.8 tonnes. Over the period 1990 to 1999, BC ranked second among the provinces in overall improvement (i.e., in moving toward lower per capita emissions).

British Columbia has made impressive strides on wastewater, by sharply increasing the percentage of population served by secondary and tertiary treatment facilities. In 2000 it placed fifth in Canada in the percentage of the population served by sewers that had secondary or better treatment facilities, and it outdistanced all other provinces in improvement over the 1990s. However, it should be noted that the three Prairie provinces and Ontario have over 90% of their population served by secondary or better wastewater treatment facilities, compared to only 63% in the case of BC. In part this reflects BC's geographic position as a coastal province, which has led to significant amounts of waste

being pumped into the ocean. On parks and protected areas, BC leads Canada – indeed, it is first in North America – in the proportion of land officially set aside for this purpose, at 13.1%, compared to a national average of 7.3% and 12.5% in next-door Alberta.

For life expectancy, BC led the country as of 1998, the last year for which data is available. Over the 1990s, BC also ranked first in raising life expectancy, reaching 79.5 years by 1998, up from 78.1 years at the start of the decade. Turning to other health indicators, British Columbia scores well on cancer mortality, with the third lowest mortality rate in the country. Among the provinces, it ranked fourth on progress in reducing cancer mortality between 1990 and 1997. On the incidence of low birth weight, an internationally recognized indicator of health and social condition, BC had second best record in Canada in 1998 and ranked third in improvement from 1990 to 1998.

The Progress Board's target for low-income incidence is based on Statistics Canada's "*unofficial low income cut off*" indicator, or LICO. In 1999 BC was sixth among the provinces, with 16.1% of families and unattached individuals living below the LICO level, slightly higher than the national average of 15.8%. Over the period 1991 to 1999, BC ranked seventh in Canada in progress on this core target. The low-income cut-off is defined by Statistics Canada as the percentage of the population that spends 54.7% or more of after-tax income on the basics of food, shelter and clothing. While some critics have argued that LICO is flawed as a measure of poverty, it is included in this report because of its widespread use by Canadian researchers and governments and because suitable alternative measures are not available.

British Columbia does not perform well in a Canadian context on many common measures of crime. In 2000, it had the country's highest combined personal and property crime rate per 100,000 people, with the vast majority of reported incidents falling in the property crime category. Despite this poor showing, the good news is that BC has experienced a 26.8% drop in combined personal/property crime rates since 1991. Among the provinces, BC ranked fifth in reducing crime rates during the past decade.

Goal: Make BC a leader in Canada on environmental quality, health outcomes and social condition by 2010.

- **Environmental Quality**: target 1st in Canada for environmental quality by 2010.
- **Life Expectancy at Birth**: target 1st in Canada for life expectancy at birth by 2010.
- **Low Income Incidence**: target 1st or 2nd in Canada for having the smallest percentage of families and unattached individuals living below the 'low income cut-off' level by 2010.

Core Target 4: Environmental Quality – BC currently ranks first in Canada for overall environmental quality based on an average of its performance rankings for urban air quality, wastewater treatment, greenhouse gas emissions per capita, and protected areas.

Core Target 5: Life Expectancy at Birth - In 1998, BC was first in Canada in life expectancy at birth for both men and women. It ranked fourth for improvement on this measure from 1997 to 1998, and it was first in the country in progress between 1990 and 1998.

Core Target 6: Low-Income Incidence - In 1999, BC ranked sixth among the provinces, with 16.1% of the population below the unofficial low-income cut-off level (LICO), slightly above the Canadian average of 15.8%. BC ranked eighth in progress on this measure between 1998 and 1999, and seventh in success in reducing the proportion of population experiencing low incomes over the period 1990 to 1999.

BC Regional Comparison -- Supplemental Information

British Columbia consists of a number of regional economies that differ significantly in both industrial structure and social composition. Chapter V of the report includes some initial supplemental information comparing "*large urban British Columbia*" (here defined as the Vancouver Census Metropolitan Area, or CMA) and "*regional British Columbia*" (the rest of the province) on a variety of economic, social and environmental indicators. It so happens that these two areas of the province have almost identical populations: the Vancouver CMA accounts for 49.5% of BC's total population, while "Regional BC" is home to the other 50.5%. Perhaps surprisingly, both areas have experienced similar rates of population growth since 1990. The Progress Board recognizes that British Columbia actually consists of several distinct regions, so some of the data on "Regional BC" presented in this report may be incomplete because it fails to examine trends in identifiable sub-regions such as Greater Victoria, the Interior, the Okanagan or the Kootenays. In the next stage of our work, we intend to explore patterns of regional growth and to address the question of regional economic development in more depth.

The employment gap between Greater Vancouver and Regional BC – as measured by the employment-to-population ratio – has widened since 1990, and this divergence has been one of the factors leading to higher relative incomes in Vancouver CMA. The data suggest that average employment income in the Vancouver CMA exceeds that in Regional BC by more than 15%. Per capita retail sales and housing starts were also somewhat higher in the Vancouver region than the rest of the province over most of the 1990s. As well, the value of non-residential building permits has been appreciably higher in the Vancouver CMA. Indicators of educational level and entrepreneurial activity also differ between these two broad regions. The Vancouver CMA has proportionately more residents with university credentials and a larger fraction of the labour force employed in natural and applied sciences and related occupations. It also significantly outpaces Regional BC in rates of new business formation. All of these findings help to explain divergent income levels in the two regions as well as the considerably stronger income growth seen in the Vancouver CMA over the 1990s.

A review of available regional indicators on the environment, health and social condition paints a mixed picture. Vancouver falls in the middle of BC cities in air quality (measured by PM_{10} concentrations), but it scores noticeably better than the rest of the province on wastewater treatment. While life expectancy at birth is higher in the Vancouver CMA and cancer mortality is lower than in Regional BC, the Lower Mainland fares worse when it comes to the incidence of low-birth weights. Finally, personal and property crime rates were consistently higher in the Vancouver CMA over the 1990s.

Outline of the Report

The remainder of this report is divided into six chapters and a number of appendices.

Chapter I provides a brief introduction and overview of the BC Progress Board.

Chapter II describes the methodology used in the report, and also discusses the economic growth process.

Chapter III outlines the report's benchmarking analysis for the economy, focusing on measures of growth, prosperity, innovation and education.

Chapter IV outlines the benchmarking analysis for the environment, health and social condition.

Chapter V offers some preliminary comparative information on economic, social and environmental trends in the Vancouver Census Metropolitan Area and Regional British Columbia.

Chapter VI comments briefly on the BC Progress Board's future work plan.

The various appendices provide detailed tabular data on all of the core targets and performance indicators, as well as the regional measures and the Canada-US comparisons reviewed in this report.

Table of Contents

I. INTRODUCTION AND OVERVIEW 1

BC Progress Board: Structure, Mandate and Initial Report 1

II. BENCHMARKING BRITISH COLUMBIA: REACHING OUR POTENTIAL 2

Reaching our Potential 2
Measuring Progress 2
Critical Factors for Economic Growth and Development 3
Targets and Performance Indicators 6
Jurisdictions Studied 8
Core Target and Performance Indicators: Progress Measurement and Ranking 9
Supplemental US Comparisons: Progress Measurement, Ranking and Conversion Issues 10

III. ECONOMY, INNOVATION AND EDUCATION 15

Overview 15
Targets and Performance Indicators 18

IV. ENVIRONMENT, HEALTH AND SOCIETY 48

Overview 48
Targets and Performance Indicators 50

V. COMPARISON OF THE LOWER MAINLAND AND REGIONAL BRITISH COLUMBIA 67

Overview 67
Economy, Innovation and Education 69
Environment, Health and Society 80

VI. FUTURE PROGRESS BOARD WORK AND REPORTING 89

APPENDICES

A. Board Members 93
B. Advisory Group Members 94
C. Summary Progress Measurement Table 94
Core Measures: Summary Overview BC and Other Provinces 95
D. Glossary of Terms 96
Economy, Innovation and Education 96
Environment, Health and Society 100
Supplemental Information: US Comparisons 102
Supplemental Information: BC Regional Comparisons 105
Economy, Innovation and Education 105
Environment, Health and Society 107
E. Detailed Tables – Core Targets and Performance Indicators 109
Economy, Innovation and Education 109
Environment, Health & Society 115
Supplemental Information: US Comparisons 119
F. Detailed Tables –Comparison of the Lower Mainland and Regional BC 123
Economy, Innovation and Education 123
Environment, Health and Society 125

I. Introduction and Overview

BC Progress Board: Structure, Mandate and Initial Report

The BC Progress Board is an Independent Panel established in July 2001 by Premier Gordon Campbell. Comprised of 15 eminent British Columbians, the Board has two mandates:

> 1) To provide advice on the development of the best means to benchmark British Columbia's competitive performance over time and relative to other jurisdictions; and,
>
> 2) To identify issues of importance to the future prosperity of British Columbia and advise the Premier on strategies, policies and actions necessary to improve the performance of the provincial economy and its social policy supports.

This document represents the first step in establishing a framework to measure the province's performance as specified in the first mandate. The framework involves "*competitive benchmarking*", that is, laying out "*where BC is*" in relation to key competing jurisdictions, and establishing "*where we should be*" as a province. Beginning with the decade of the 1990s as a baseline, the information presented in this document summarizes BC's relative performance on a range of indicators using the best available data. We take seriously our roles of providing the public with information on BC's progress and assisting decision makers with their policy deliberations.

The implementation of the BC Progress Board's measurement framework is very much a ***work in progress***. In a short period of time, we have identified and gathered data on our "Core Targets" and "Performance Indicators". We welcome your views, comments and ideas on the contents of this report. We also look forward to your suggestions on how to achieve economic renewal in British Columbia – E-mail us at: ideas@bcprogressboard.com.

This document is organized into six sections. The next section provides a description of the framework that has been developed to monitor the province's performance and progress. The remaining sections present the initial results from the implementation of this framework.

II. Benchmarking British Columbia: Reaching Our Potential

Reaching our Potential

The Progress Board believes there is fundamental congruence between a vibrant economy and a prosperous and healthy society. A strong, competitive economy enables government to provide the services required by the public. Over the last decade, there is considerable evidence that BC's economic performance has lagged. On many of the economic measures examined in this report, British Columbia has fallen to a third place position or worse among the ten provinces. Where should BC be?

Fundamentally, the BC Progress Board is convinced that British Columbia is well placed to become the top-performing jurisdiction in Canada. British Columbia has all of the natural and human endowments necessary to become the **leading province in Canada**. Here are a few key ones:

- abundant resources and a natural beauty renowned around the world;
- BC is uniquely situated between Europe and Asia;
- excellent access to the dynamic US market;
- high quality infrastructure to transport goods, services and people;
- BC enjoys a diverse multi-cultural society;
- a highly skilled and increasingly well-educated workforce capable of producing a wide-range of goods and services for domestic and international markets; and,
- BC has stability in its institutions and the rule of law.

Measuring Progress

To measure the province's rate of success over time it is necessary to have a measurement framework. The framework used in this report consists of a set of goals or targets coupled with a procedure for measuring progress towards their achievement.

The specific framework we have developed to chart progress relies on "benchmarking." Benchmarking involves specifying goals for realistic improvement in relation to other jurisdictions, and then monitoring the pace at which these goals are being reached over time. A key advantage of benchmarking is that it helps one begin to understand the changes needed to improve overall performance. Put another way, benchmarking is "the practice of being humble enough to admit that someone else is better than you, and being wise enough to learn how to be as good as or even better than them".[1] Benchmarking can

[1] Source: http:strategis.ic.gc.ca/SSG/be00208e.html

help BC become more competitive through focusing attention on both strengths and weaknesses as well as by highlighting the performance of other jurisdictions.

The mandate of the Progress Board puts a strong emphasis on building a more prosperous provincial economy. The key economic targets highlighted in this report are increasing the rate of economic growth (as measured by the growth of real gross domestic product per person) improving BC's standard of living (as measured by higher income levels), and providing job opportunities for people in the province who seek work. These three core economic targets support a broader overarching goal of making British Columbia a leading economic performer within Canada.

The current framework focuses not only on the achievement of our overarching goals and targets, but also on trends in a number of their major determinants. Many factors influence a jurisdiction's success in growing its economy, raising its standard of living and creating jobs. A jurisdiction's performance on these factors foretells its future track record in the core areas of growth, income and jobs. It is important, therefore, to monitor performance to ensure we are moving in the right direction. Careful monitoring also helps to pinpoint the reasons for past success or failure in achieving goals.

Although economic prosperity is the Progress Board's primary concern, Board members recognize that non-economic goals also matter. Citizens of BC also want a clean environment, a healthy population, and participation by as broad a cross-section of the population as possible in the fruits of economic growth. While there are many indicators that can shed light on progress in these areas, environmental quality, life expectancy at birth, and minimizing the incidence of low income among people are the three key targets chosen by the Progress Board to gauge overall progress on the environment, health and social condition. These three core targets support a broader overarching goal of making British Columbia a leader in environmental quality, health status and social condition within Canada. Several other performance indicators are also examined in order to provide a more complete picture of changes in BC's quality of life.

Critical Factors for Economic Growth and Development

The Economic Advisory Group (EAG) to the BC Progress Board was asked to identify the critical factors in the economic growth process. A lengthy preliminary list was initially developed, ranging from addressing aboriginal land claims to improving the efficiency of the public sector, fostering entrepreneurship and strengthening management. A more systematic matrix of ten key factors was then developed (see Table A on page 4). The table highlights three columns:

- Necessary conditions – those elements that must not only be present or available to the economy but that must also facilitate economic growth;

- Growth agents – those factors that individually or in combination account for economic development; and,

- Enabling strategies – those initiatives to be undertaken by government that may lessen or eliminate barriers to investment and growth, or create opportunity for expansion to occur.

Table A: Critical Factors in Economic Growth

I **Necessary Conditions**	II **Growth Agents**	III **Enabling Strategies**
1. Supply Spectrum *Endowment* *Location* *Attractive powers* *Industry structure* *Regional dispersion*	4. Entrepreneurship, Management *Organization* *Strategy* *Decision-making* *Capital attraction*	8. Access to Opportunity *Resources* *Markets and trade* *Information, knowledge* *Savings /investment generation*
2. Policy Framework *Attitude to business* *Taxes* *Regulation* *Size & functions of government*	5. Labour and Human Capital *Education* *Innovation* *Income-generation* *Flexible labour markets*	9. Removal of Restrictions/ Inefficiencies *Resolve aboriginal land claims* *Infrastructure deficiencies, bottlenecks* *Monopoly services* *Regulatory access*
3. Infrastructure *Transportation* *international* *interregional* *metropolitan* *Communications* *Services* *Institutions*	6. Technology *Incorporated* *Developed* *Cost reduction* *Product, process improvement* 7. Capital Accumulation *Net (real) capital stock* *Total factor productivity* *Profits /investment*	10. Stimulation of Investment *Formation of partnerships* *Strategic sales (assets, crown corporations)* *Financial institutions* *Venture capital*

Source: CCG Consulting Group Ltd.

The three columns highlight ten critical prerequisites for sustained economic growth and development. The Table starts (cell one) with a realistic assessment of what the province can produce, leading to a group of goods and services industries that can locate in BC on a competitive and attractive rate-of-return basis. It concludes (cell ten) with strategies aimed at stimulating the investment (and capital accumulation) necessary to raise living standards over the medium and longer-term.

The other entries in the table identify additional categories of factors important to the economic growth process, such as a policy framework that encourages growth, high quality transportation and communications infrastructure, the availability of educated "human capital", receptiveness to innovation, and access to resources, markets and information.

An assessment of critical factors in the economic growth process from the perspective of a small trade-dependent, sub-national jurisdiction like British Columbia leads to an important conclusion: to attract the private sector investment necessary for sustained growth to occur, policy makers need to pay close attention to cost competitiveness. In particular, taxation and regulatory policies must be designed with a view to keeping overall business production costs competitive. Removal of monopolies and the introduction of competition into both regulated and public service markets may also support the objective of achieving competitive cost structures. Put simply, competitive taxation and regulatory policies are essential to encourage the investment spending that leads to technological innovation and upgrading, higher productivity and lower unit production costs.

Similarly, since skilled human capital, like investment capital, is also increasingly mobile across jurisdictions, the taxes and levies imposed on individuals by government also need to be reasonable as measured against the value of the public services and programs delivered by state institutions.

The combination of critical factors is not unique to British Columbia. It is true that BC is unusual in the complexity of its economic and social setting, and its administrative challenges are certainly formidable. Even so, the trends seen in BC have also been experienced in many other sub-national jurisdictions where economies are open to trade and competition. Among these are static or sub-par economic and population growth rates in outlying rural or resource-based regions (see Section V of this report for further information), and a related trend toward urbanization and a clustering of economic growth stimuli and employment opportunities through a process of agglomeration.

What sets BC apart is the particular mix of sectors and regions, and the need to apply the tests that the above factors represent (as a check-list) on an industry-by-industry basis. For both the province as a whole and its numerous sectoral and regional segments, the various growth-supporting factors can, over time, be integrated with the benchmarking exercise that the Progress Board is undertaking. In most cases, corresponding benchmarks already exist for the entries in each factor category. In other cases, it may be difficult to provide appropriate indicators that meet the criteria for the Progress Board's measurement framework (i.e. timeliness and cross-jurisdictional comparability).

A further use for the critical factors may be in policy determination. In this respect, two or more critical factors may be combined to lead to appropriate policy approaches. For example, projects considered to be worthy in the infrastructure category (in the 1st column) may be tested against criteria in capital accumulation (in the 2nd) and those proposed for private investment or a private-public partnership (in the 3rd). In a similar vein, the policy framework components of taxes, regulation, property rights (among others) should lead to an expansion and upgrading of entrepreneurship and management, and

thus to an increase in the number of firms taking advantage of greater access to opportunity.

Finally, the various factors listed in the Table are consistent with empirical findings in modern economic growth theory. At its simplest, the basic policy prescription flowing from the theory is sometimes held to be lower taxes, streamlining regulations, reducing rigidities in labour markets, and investing in innovation and human capital development. These conditions are fundamental to establishing a setting conducive to sustained growth, but a number of other elements – from technology to capital formation – are also required. At the core, it is the adoption of technology, driven by committed managers and entrepreneurs, that leads to the productivity gains that are the source of higher incomes, and that bolster the relative competitiveness of a jurisdiction. Yet before this result can occur, there must be ongoing investment, which requires profits that may need to be generated internally through a general cost reduction strategy.

Targets and Performance Indicators

To implement the benchmarking framework that forms the core of this report it is necessary to create statistical measures of the goals and their determinants. The goals are defined in terms of **target** variables, and the determinants of these variables are termed **performance indicators**. Changes in the latter have implications for trends in the target variables.

Over the course of the fall of 2001, BC Progress Board staff engaged in an iterative process with the Board itself and its Economic Advisory Group (see Appendix B) to arrive at an array of suitable target variables and performance indicators. For measures of environment, health and social condition, staff consulted with knowledgeable government officials. To the extent possible, the selection of targets and indicators of progress was conducted in accordance with the following criteria:

- The measures must provide timely cross-jurisdictional comparisons;
- The measures must represent an unbiased reporting of the condition (that is, they should be based on neutral and credible third party information);
- The measures should be consistent across time and jurisdictions; and,
- Generally, the measures must not be collinear with other variables (that is, they should not simply replicate information presented in another measure).

An additional consideration governing the selection of measures for inclusion in the benchmarking exercise was the Board's desire to keep the number of indicators small enough to make the exercise manageable and relatively easy to understand.

The result of the selection process is the set of core measures comprised of "*target*" variables and "*performance indicators*" that form for body of this report.

The Progress Board's overarching economic goal is to:

Make BC an economic leader in Canada by 2010.

Targets:

- Core Target 1: Economic Growth - Growth of Real Gross Domestic Product Per Capita
- Core Target 2: Standard of Living – Level of Real Personal Disposable Income Per Capita
- Core Target 3: Jobs - Employment to Population Ratio

Performance Indicators:

- Performance Indicator 1: Average Hourly Earnings
- Performance Indicator 2: Productivity
- Performance Indicator 3: Total Exports per Capita
- Performance Indicator 4: Taxpayer Supported Debt as Percent of GDP
- Performance Indicator 5: Per Capita Tax Burden - Consolidated Provincial and Local
- Performance Indicator 6: Top Personal Marginal Tax Rate
- Performance Indicator 7: Provincial Deficit/Surplus Levels
- Performance Indicator 8: Net Inter-Provincial Migration
- Performance Indicator 9: Total Fixed Business Investment
- Performance Indicator 10: Secondary School Graduates
- Performance Indicator 11: University Completion
- Performance Indicator 12: Research and Development as a Percent of GDP
- Performance Indicator 13: Percentage of Persons Employed in Natural Sciences and Related Occupations

The Progress Board's overarching goal for environment, health and society is:

Make BC a leader in Canada on environment quality, health outcomes and social condition by 2010.

Environment, Health and Society

Targets:

- Core Target 4: Environmental Quality
- Core Target 5: Life Expectancy at Birth
- Core Target 6: Low Income Incidence

Performance Indicators:

- Performance Indicator 14: Air Quality
- Performance Indicator 15: Greenhouse Gas Emissions
- Performance Indicator 16: Wastewater Treatment
- Performance Indicator 17: Parks/Protected Areas
- Performance Indicator 18: Cancer Mortality
- Performance Indicator 19: Low Birth Weight
- Performance Indicator 20: Personal and Property Crime

Jurisdictions Studied

The target variables and performance indicators for British Columbia are benchmarked against other provinces and Canada as a whole. To supplement these within-country jurisdictional comparisons, topic boxes comparing BC's performance relative to the US states of Washington, Oregon and California (together with data on Alberta, Ontario and Quebec) are also provided.

In recognition of the fact that the province consists of a number of regions that differ significantly in their economic structure, we have also reported on 17 measures that provide a broad picture of differences between the Lower Mainland and the other parts of the province. The inclusion of these indicators represents an initial step to benchmark regional performance. Unfortunately, suitable regional data is not available for all of the core "targets" and "performance indicators" used at the provincial/state level. In future, the Progress Board hopes to carry out additional work on regional economic and social performance.

In the tables in this document, each jurisdiction is labeled as follows:

- British Columbia – BC
- Alberta – AB
- Saskatchewan – SK
- Manitoba – MN

- Ontario – ON
- Quebec – QB
- New Brunswick – NB
- Nova Scotia – NS
- Prince Edward Island – PE
- Newfoundland – NF
- Canada – CAN
- California – CF
- Oregon – OR
- Washington State – WA
- Vancouver Census Metropolitan Area – Vancouver CMA
- Regional BC – RBC

Core Target and Performance Indicators: Progress Measurement and Ranking

To provide an indication of how BC compares with other jurisdictions as well as vis-à-vis its own past performance, we have organized the indicators in this report into three ***"Progress Measures"***:

- ***Rank by Province*** – assesses BC's standing or performance relative to other jurisdictions in the last year for which data is available for the indicator. Each jurisdiction is given an ordinal ranking from "best" to "worst" with 1 signifying the best;

- ***One Year Progress Check*** – provides a rank based on progress recorded (or rate of change) during the last year for which data is available relative to the previous year. Each jurisdiction is again given an ordinal ranking from "best" to "worst"; and,

- ***Period Progress Rank*** – provides a rank based on progress experienced in each jurisdiction over a longer time period (the average annual rate of progress over the period). Each jurisdiction is again then ranked from "best" to "worst" using an ordinal rank starting with 1 for best.

The data used in this report are as current as possible. For almost all of the economic indicators, Canadian data up to the year 2000 became available in late October 2001. We have chosen not to use any forecast information or "preliminary estimates". Such data are often subject to significant uncertainty and revision and, as a result, are of little value in an analysis that seeks to understand progress measurement.

Supplemental US Comparisons: Progress Measurement, Ranking and Conversion Issues

To provide an indication of how BC compares with US jurisdictions, the report contains a series of topic boxes that provide information on seven jurisdictions: BC, Alberta, Quebec, Ontario, Washington, Oregon and California. Here too, the data is organized around three ***Progress Measures***:

- ***Rank by Jurisdiction*** – assesses BC's performance relative to other jurisdictions in the last year for which data is available for the indicator. Each jurisdiction is given an ordinal ranking from "best" to "worst" with 1 signifying the best among the seven jurisdictions reviewed in this part of the report;

- ***One Year Progress Check*** – provides a rank based on progress experienced (or the rate of change) in the last year for which data is available relative to the previous year. Each jurisdiction is again given an ordinal ranking from "best" to "worst"; and,

- ***Period Progress Rank*** – the values for the average annual rate of "improvement" for the Canadian and US indicators are computed using a formula that calculates the compound growth (or improvement) rate between the starting and ending values of each indicator. This method, rather than the average of the year-to-year growth rates for the period, has been used for Canada-US comparisons because there are limited data available for some indicators, and thus fewer observations for each indicator.

One of the difficulties with comparing performance in Canada and the United States is that economic activity is measured in the two countries' respective national currencies. To compare economic performance it is necessary to convert the data into a common currency – whether US or Canadian dollars. For some indicators this conversion simply amounts to multiplying the US data by the prevailing Canada-US market exchange rate. For other indicators the conversion process is more complicated.

Two measures of the exchange rate are often employed to convert indicators into a common currency. The first is the one mentioned above, namely, the actual market exchange rate. The second involves using what is known as a Purchasing Power Parity (PPP) exchange rate. This rate adjusts for differences in the prices of similar goods between Canada and the United States, in order to better gauge the true purchasing power of income between the two countries from the perspective of national residents. The PPP version of the exchange rate assists in answering the question: Can residents of BC purchase the same amount of goods and services with their (Canadian dollar) incomes as residents of particular American states do with their (US dollar) incomes?

For example, suppose a hamburger costs $1.50 Canadian in BC and $2.00 US in Washington. In that case, $15 Canadian would purchase 10 hamburgers in BC and $15 US would purchase 7.5 hamburgers in Washington. The difference in the purchasing power

of income - $15 measured in the two currencies – between BC and Washington reflects the difference in the price of the hamburgers. If one is converting the US dollar income into Canadian dollar income, one needs to account for the fact that the price of hamburgers differs. While the market exchange rate reflects such differences in the long run, it often provides a distorted picture of gaps in purchasing power in the short run.

The PPP exchange rate equates the price of hamburgers in the two countries in a common currency, which is what the actual exchange rate does in the long run. For the above example, the PPP exchange rate for hamburgers is $US 0.75 – the ratio of the price of the Canadian hamburger to the price of the US hamburger in their own currency. Converting the income of residents of Washington to Canadian dollars using the actual exchange rate of roughly $US 0.63 (as of January 2002) overestimates the amount of hamburgers (and of goods and services in general) that people in Washington can actually purchase – their "real" income. While 15 US dollars converts into 23.8 Canadian dollars at the January 2002 market exchange rate, it still can only buy 7.5 hamburgers in Washington State. As a result, the PPP exchange rate yields a better estimate of the true purchasing power of income when converting to a common currency than does the market exchange rate.

Table B: Core Targets and Performance Indicators - Where BC Ranks Among 10 Canadian Provinces

		Core Target or Performance Indicator	Period	BC's Rank by Province (last available data year)	One Year Progress Check	Period Progress Rank	Description
Economy, Innovation and Education		1. Economic Growth: Growth of Real GDP per Capita	1991 - 2000	6	3	10	Assessment of British Columbia's performance on key measures of economic performance, innovation and education.
		2. Standard of Living: Real Personal Disposable Income per Capita	1991 - 2000	3	7	10	
		3. Jobs: Employment to Population Ratio	1991 - 2000	5	6	10	
		1. Average Hourly Earnings	1991 - 2000	2	10	2	
		2. Productivity	1991 - 2000	5	4	8	
		3. Total Exports per Capita	1991 - 2000	7	4	10	
		4. Tax Payer Supported Debt	1991/92 - 2000/01	2	5	6	
		5. Per Capita Tax Burden	1991/92 - 2000/01	7	6	3	
		6. Top Marginal Tax Rate	1992 - 2001	3	1	4	
		7. Provincial Deficit/Surplus	1991/92 - 2000/01	3	5	4	
		8. Net Inter-Provincial Migration	1991/92 - 2000/01	8	3	8	
		9. Gross Fixed Business Investment	1991 - 2000	6	4	10	
		10. Secondary School Graduates	1990 - 1999	9	1	3	
		11. University Completion	1991 - 2000	2	4	2	
		12. R&D as a % of GDP	1990 - 1998	6	9	6	
		13. Natural and Applied Sciences	1991 - 2000	4	6	3	
		4. Environmental Quality	-	1	n/a	n/a	Assessment of British Columbia's performance on key measures of environmental protection, health outcomes and societal conditions.
Environment, Health and Society		5. Life Expectancy at Birth	1990 - 1998	1	4	1	
		6. Low Income Incidence	1990 - 1999	6	8	7	
		14. Air Quality	2000	n/a	n/a	n/a	
		15. Greenhouse Gas Emissions	1990 - 1999	3	9	2	
		16. Wastewater Treatment	1991 - 1999	5	n/a	1	
		17. Protected Areas	2001	1	n/a	n/a	
		18. Cancer Mortality Rate	1990 - 1997	3	9	4	
		19. Low Birth Weight Rate	1990 - 1998	2	2	3	
		20. Personal and Property Crime	1991 - 2000	10	3	5	

Table C: Core Targets and Performance Indicators - Supplemental Information on BC's Ranking Relative to Selected US and Canadian Jurisdictions (BC, AB, ON, QB, WA, OR, CF)

		Supplemental Performance Indicator	Period	BC's Rank by Province/State (last available data year)	One Year Progress Check	Period Progress Rank
Economy, Innovation and Education		Real GDP per Capita	1991 - 1999	6	1	6
		Real Personal Disposable Income per Capita	1991 - 2000	6	4	7
		Employment-Population Ratio	1991 - 1999	6	3	6
		Average Hourly Earnings	1992 - 2000	3	1	4
		Hourly Labour Productivity	1992 - 1999	6	5	7
		Unit Labour Costs	1992 - 2000	4	4	4
		Tax Payer Supported Debt	1991/92 - 1998/99	5	7	5
		Per Capita Tax Burden	1991/92 - 1998/99	5	1	3
		Marginal Personal Income Tax Rate	1992 - 2000	7	3	4
		Net Inter-Provincial (Inter-State) Migration	1990 - 1999	7	2	6
		R&D as a % of GDP	1993 - 1998	7	7	7
Environment, Health and Society		Air Quality	2000	n/a	n/a	n/a
		Low Birth Weight Rate	1993 - 1998	1	1	2
		Personal and Property Crime	1995 - 2000	7	4	2

This page left blank intentionally.

III. Economy, Innovation and Education

Overview

During the 1990s, British Columbia fell well short of being a leading economy within Canada.

BC posted the sixth best growth in real gross domestic product (GDP) per capita in 2000. Despite this relatively poor performance BC maintained the fourth highest level of real gross domestic product (GDP) per capita in the country in that year. Over the decade 1991 to 2000, BC's relative position within Canada deteriorated as it ranked last among the provinces in increasing real GDP per capita. Stated differently, BC was, on average, the least successful province in expanding the size of the economic pie on a per person basis over the decade. In 1991, its real GDP per capita stood $1,781 above the national average (in 1997 dollars); by 2000, BC had fallen $2,251 below the Canadian average. At the same time, BC went from having a real per capita GDP $2,951 below Alberta's at the start of the period (1991) to trailing its neighbor by a startling $9,371 ten years later.

In 2000, BC recorded the third highest level of real personal disposable income per capita in Canada, although this still left the typical British Columbian $577 poorer than the average Canadian; in 1991, BC enjoyed the country's second highest average real personal disposable income, some $958 above the national average. Thus, over the decade BC shifted from being an above-average to a below-average performer within Canada on this basic measure of standard of living. Whereas Alberta trailed BC by $268 in real disposable income per person in 1991, by 2000 the two provinces' positions had reversed, with Alberta having moved in front by $1,773. Real personal disposable income levels in BC also fell further behind those of Washington, Oregon and California during the 1990s.

In 2000, British Columbia stood fifth among the provinces on the core target for job performance used in this report, the employment-to-population ratio among those aged 15 to 64. In that year, 70.2% of British Columbians in this age group were employed, versus a nation-wide average of 71.1%. Although all ten provinces saw their employment to population ratios rise between 1991 and 2000, BC posted the smallest advance over the period.

A review of other performance indicators included in this report suggests several other factors that may have contributed to BC's relatively poor showing in the crucially important areas of economic growth, standard of living, and jobs. In particular, in 2000 BC ranked a mediocre fifth in Canada in aggregate productivity, as measured by real GDP per hour worked, and it was eighth in raising economy-wide productivity from 1991 to 2000. On the other hand, over the same period BC recorded the second biggest rise in average hourly earnings and, by 2000, it had the second highest hourly earnings in the country. The combination of weak productivity growth and sizable jumps in hourly earnings means that unit labour costs have increased more rapidly in British Columbia than in most other jurisdictions. Unit labour costs, which incorporate average hourly earnings and productivity into a single indicator, are a common proxy for overall business cost

competitiveness. Unit labour costs are higher in British Columbia than in Alberta, Ontario and Quebec, and over time BC's cost competitiveness has clearly deteriorated relative to the rest of Canada. All Canadian jurisdictions, including British Columbia, have lower unit labour costs than do the American states of Washington, Oregon and California. This mainly reflects the low (and steadily diminishing) value of the Canadian dollar compared to its American counterpart. Without a weakening Canadian dollar, BC's business cost competitiveness would have declined relative to most US states in the 1990s.

Within Canada, BC stood sixth in fixed business investment as a proportion of GDP in 2000, and it was last among the provinces in raising the business investment to GDP ratio from 1991 to 2000. BC ranks sixth in the country on research and development spending as a percentage of GDP, and it was also sixth in the average rate of progress recorded on this indicator of innovation during the years 1990 to 1998. In addition, it should be noted that Washington, Oregon and California all channel larger shares of GDP toward research and development activity than does British Columbia, and have done so for many years. This may help to explain why these US states have generally outpaced BC in productivity and income growth in the past decade.

By 2000-01, British Columbia had the fourth highest consolidated provincial-local government tax burden on a per person basis ($5,045 per person), although this was below the average burden for all provinces ($5,902), which is pushed up by relatively high provincial-local taxes in the populous provinces of Ontario and Quebec. BC ranked third in Canada in "progress" on this fiscal indicator between 1991-92 and 2000-01 – i.e., consolidated provincial-local taxes per person actually rose faster, on average, in seven other provinces.

Both BC's relative standing within Canada in the most recent year and its progress over the 1990s are quite impressive on several other economic performance indicators addressed in this report, including top marginal tax rates, the burden of taxpayer-supported debt, university graduates as a share of the working-age population, and the proportion of the labour force made up of people in natural and applied sciences and related occupations.

A bright spot for British Columbia in the 1990s was the relative strength of its fiscal position. Between 1991-92 and 2000-01, BC ranked fourth among the provinces in progress on the deficit (i.e., in improving the fiscal balance in relation to GDP). Also, in 2000 British Columbia had the second lowest taxpayer-supported debt burden in Canada calibrated as a share of GDP. However, the fact is that BC's fiscal position has worsened markedly in the past year, with large deficits and a rapidly-escalating taxpayer supported provincial debt now predicted through at least 2004.

Recent years saw BC achieve modest success in reducing the top marginal personal tax rates paid by highly skilled workers and successful entrepreneurs. From 1994 to 1998, BC had the highest top combined federal-provincial marginal tax rate in North America (54.2%). By 2001, BC had established the third lowest rate in Canada; and in 2002, it is

poised to have the second-lowest top rate. The progress made on this indicator should bolster the province's attractiveness for mobile professional, managerial and technical personnel, as well as for talented entrepreneurs whose business activities are central to the process of wealth- and job-creation.

BC fares well on the main measure of university completion used in this report. Among the 25-54 age group, it had the second highest percentage holding university credentials in 2000 (27.7%), slightly above the Canada-wide average (27.1%) and considerably better than Alberta (23.6%). BC also ranked second in progress on this performance indicator over the decade. However, it is also true that BC's track record for "educating its own" is considerably less impressive, as the province traditionally has relied on in-migration to meet a large portion of its demand for educated workers. In the early 1990s, BC's university completion rate, defined as the number of baccalaureate degrees granted by post-secondary institutions in the province for the 18 - 24 age cohort, stood at just two-thirds of the national average. By 1998, this figure had climbed to 80% of the national average, as university enrollment rates and the numbers of graduates both rose significantly with the development of five university colleges and two additional degree granting institutions.

In year 2000, BC placed fourth in Canada for the proportion of the labour force employed in natural and applied sciences and related occupations, and it ranked third in progress in this area between 1991 and 2000. Tracking this indicator is a useful way to assess the extent to which a jurisdiction's labour force skills are rising over time. The good news is that the quality of BC's "human capital base" appears to have improved relative to most other provinces.

Targets and Performance Indicators

Goal

Make BC an economic leader in Canada by 2010.

Targets

1. **Economic Growth**: target 1st or 2nd among the provinces in the growth of real GDP per capita by 2010.
2. **Standard of Living**: target 1st or 2nd in Canada for the level of real personal disposable income per capita by 2010.
3. **Jobs**: target 1st or 2nd in Canada for the employment to population ratio among those aged 15 to 64 by 2010.

Performance Indicators

1. Average Hourly Earnings
2. Productivity
3. Total Exports per Capita
4. Taxpayer Supported Debt as a Percent of GDP
5. Per Capita Tax Burden - Consolidated Provincial and Local
6. Top Marginal Personal Income Tax Rate
7. Provincial Deficit/Surplus Levels
8. Net Inter-Provincial Migration
9. Business Gross Fixed Capital Formation
10. Secondary School Graduates
11. University Completion
12. Research and Development as a Percent of GDP
13. Natural and Applied Sciences and Related Occupations

Where BC Ranks

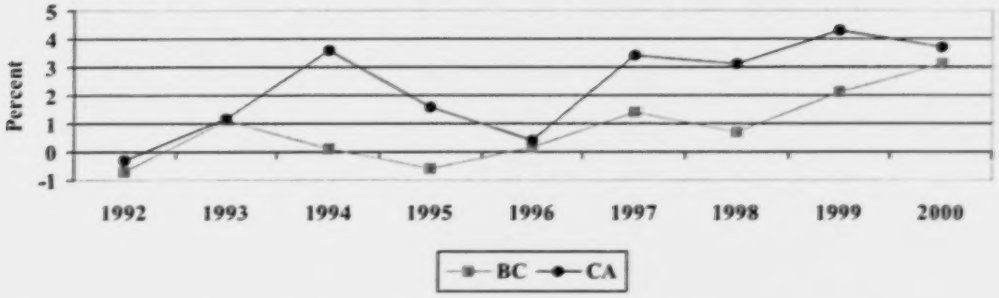
Economy, Innovation and Education

Economy, Innovation & Education

	1. Economic Growth: Growth of Real GDP per Capita	2. Standard of Living: Real Pers. Disposable Income per Capita	3. Jobs: Employment to Population Ratio	1. Average Hourly Earnings	2. Productivity	3. Total Exports Per Capita	4. Tax Payer Supported Debt	5. Per Capita Tax Burden	6. Top Marginal Tax Rate	7. Provincial Deficit/Surplus	8. Net Inter-Provincial Migration	9. Business Gross Fixed Capital Formation	10. Secondary School Graduates	11. University Completion	12. R&D as a % of GDP	13. Natural and Applied Sciences and Related Occupations	Arithmetic Average	Overall Indicative Rank
By Province (last available data year)																		
BC	6	3	5	2	5	7	2	7	3	3	8	6	9	2	6	4	4.88	3
AB	3	2	1	3	1	2	1	5	1	1	1	1	10	6	4	3	2.81	1
SK	5	8	3	7	3	3	4	8	2	2	10	3	7	7	7	10	5.56	5
MB	8	4	2	6	7	5	3	6	4	8	7	10	8	3	8	6	5.94	6
ON	4	1	4	1	2	1	5	9	4	5	2	8	6	1	1	1	3.44	2
QB	2	5	7	4	4	4	8	10	10	7	6	9	3	4	2	2	5.44	4
NB	10	7	9	8	8	6	7	3	6	6	4	5	1	8	9	7	6.50	8
NS	9	6	8	9	9	10	10	4	7	10	5	4	4	5	3	8	6.94	9
PE	7	9	6	10	10	9	6	2	8	9	3	7	2	9	10	9	7.25	10
NF	1	10	10	5	6	8	9	1	9	3	9	2	5	10	5	5	6.13	7
One Year Progress Check																		
BC	3	7	6	10	4	4	5	6	1	5	3	4	1	4	9	6	4.88	3
AB	1	1	9	8	7	7	1	2	2	2	4	1	6	8	1	9	4.31	1
SK	2	2	8	4	2	2	3	1	3	3	9	8	2	5	10	8	4.50	2
MB	4	3	5	3	9	10	8	3	7	9	5	6	9	1	8	1	5.69	7
ON	8	5	3	7	6	6	2	7	8	6	7	5	4	3	3	2	5.13	4
QB	6	6	2	5	3	3	6	9	6	8	6	3	5	7	5	3	5.19	5
NB	9	8	7	2	8	9	4	10	5	7	1	7	3	9	6	7	6.38	8
NS	10	10	4	6	5	5	9	8	9	1	10	10	7	2	2	5	6.44	9
PE	5	9	1	9	10	8	7	4	10	9	8	2	10	10	4	10	7.25	10
NF	7	4	10	1	1	1	10	5	4	4	2	9	8	6	7	4	5.19	5
Period Progress Rank																		
BC	10	10	10	2	8	10	6	3	4	4	8	10	3	2	6	3	6.19	8
AB	2	7	5	1	4	9	1	1	1	1	1	1	8	10	3	8	3.94	1
SK	6	6	8	4	2	4	2	10	2	2	6	7	10	4	4	7	5.25	4
MB	8	8	3	5	6	6	3	7	3	10	5	5	9	7	8	2	5.94	7
ON	4	9	6	3	3	2	8	6	6	3	2	8	5	8	2	1	4.75	3
QB	5	4	4	8	5	5	9	8	9	7	4	9	1	1	1	5	5.31	5
NB	7	1	2	6	10	7	7	5	5	6	9	4	7	5	10	10	6.31	9
NS	9	3	7	10	7	8	5	4	8	9	10	3	4	9	5	9	6.88	10
PE	3	5	1	7	9	3	10	9	7	8	3	6	6	3	9	4	5.81	6
NF	1	2	9	9	1	1	4	2	10	4	7	2	2	6	7	6	4.56	2

Note on Table: An arithmetic average and "overall indicative ranking" is included for summary comparison purposes only. Each Target and Performance Indicator should be viewed independently with more emphasis being placed on the three "Target" measures for comparing British Columbia's overall economic performance relative to other provinces.

BC versus Canadian Average
Growth Rate of Real GDP Per Capita
Annual Percentage Change



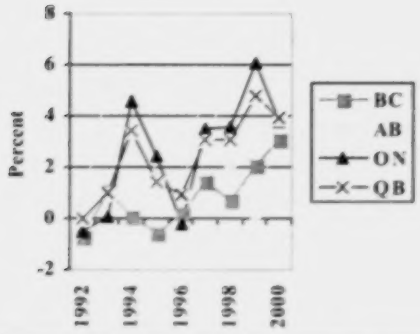
Source: BC Stats; Statistics Canada, Provincial Economic Accounts, Catalogue 13-213

Description

Economic growth (i.e., the change of real GDP per capita) is a key measure of economic prosperity, expressed in terms of the value of output (goods and services produced) per person.

Gross Domestic Product is the additional value added to the economy by current productive activities of individuals, businesses, governments and non-residents (who may purchase and sell goods and services to British Columbians).

Provincial Comparison
Growth Rate of Real GDP Per Capita
Annual Percentage Change



Note on Data: The One Year Progress Check has been calculated by ranking the percentage change for real GDP growth in 1999/2000 relative to the percentage change from 1998/1999.

Why it's Important

The growth of real GDP per capita is an effective measure of changes in the prosperity of a jurisdiction and its population. Slower growth in real GDP per capita results in lower levels of purchasing power, real personal income, and real wages and salaries. If real GDP per capita increases faster than the population, then the size of the "economic pie" is growing on a per person basis.

Where BC Ranks (Best -> Worst)

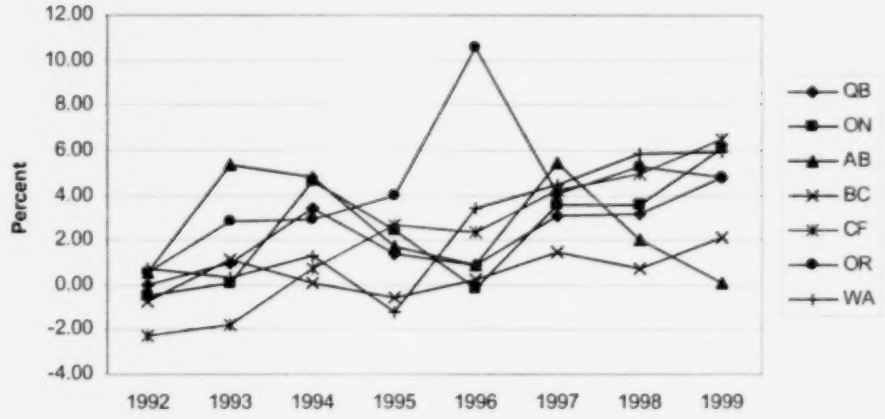
By Province (2000) - **6th**
1-Year Progress Check (2000) – **3rd**
Period Progress Rank (1991 - 2000) – **10th**

How Does BC Compare?

British Columbia posted the smallest gains in real GDP per capita in Canada in the 1990s. In 2000, British Columbia recorded the sixth highest growth in per capita real GDP. From 1991 to 2000, BC experienced an average annual increase of 0.8%, compared to 2.7% in Alberta, 2.6% in Ontario, and 2.4% in Quebec. Real per capita GDP in Canada increased by 2.3% per year.

In 2000, BC's level of real GDP per capita was fourth among provinces at $30,664, versus the Canadian average of $32,915. In comparison, real GDP per capita stood at $40,035 in Alberta, $30,764 in Saskatchewan, and $36,510 in Ontario.

Economic Growth
(Growth Rate of Real GDP Per Capita)



Source: Centre for Spatial Economics; US Bureau of Economic Analysis

Description:

This indicator is a measure of the growth rate of goods and services produced per person in a province or state. It is employed as a measure of the relative change in the "standard of living" across geographic areas. Regions with higher growth rates of per capita GDP experience greater improvements in standard of living.

Where BC Ranks:

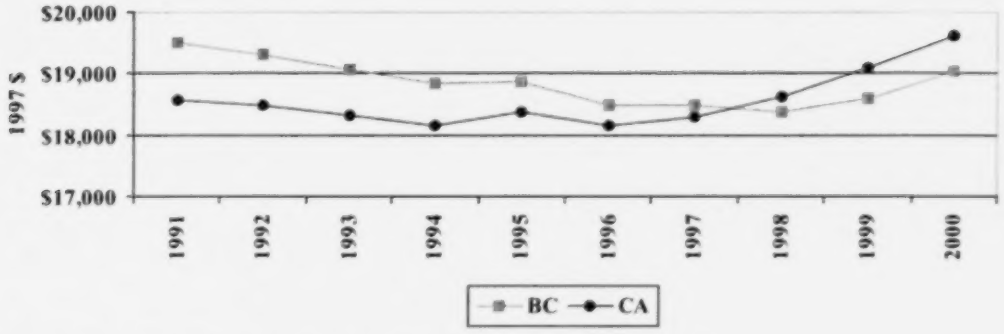
By Jurisdiction (1999) - 6
1-Year Progress Check (1998-1999) - 1
Period Progress Rank (1991-1999) - 6

How Does BC Compare?

BC compares quite poorly in terms of this measure of changes in living standards, and in fact has posted the weakest overall performance through the 1990s. British Columbia saw its best performance in 1999 when real per capita GDP grew over 2% based on the given time horizon. However, that same year Ontario and Quebec surged past BC with real per capita growth rates of 6.1% and 4.8% respectively. Per capita growth in 1999 for the three states ranged from 4.8% to 6.5%. BC has lagged the three provinces and three states throughout the 1990s. This shows that BC failed to share in the growth that took place in Canada and the United States during this time.

Note on Data: The One Year Progress Check has been calculated by ranking the percentage change for real GDP growth in 1998/1999 relative to the percentage change from 1997/1998.

BC versus Canadian Average
Real Personal Disposable Income Per Capita

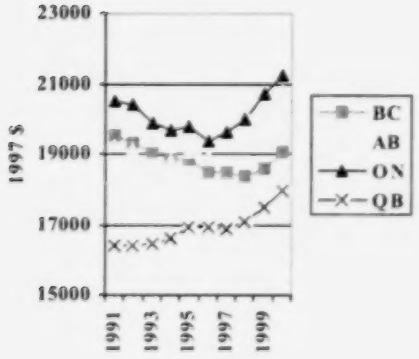


Source: BC Stats; Statistics Canada, Provincial Economic Accounts, Catalogue 13-213

Description
Real personal disposable income per capita represents total income minus certain taxes paid to all levels of government (e.g., income taxes, contributions to social security, etc.) and various fees such as medical insurance premiums, measured in 1997 dollars and expressed on a per person basis. It includes income earned by all residents of the province, regardless of where it was earned.

Why it's Important
Real disposable income per capita provides an accurate indication of individuals' spending power and standard of living.

Provincial Comparison
Real Personal Disposable Income
Per Capita

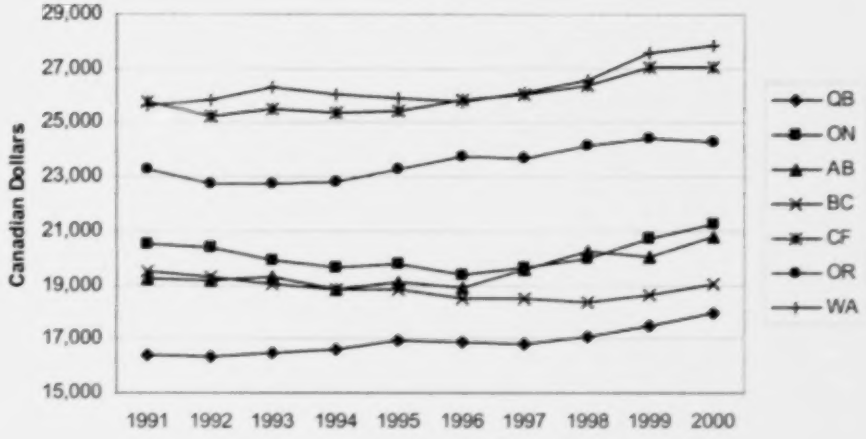


Where BC Ranks (Best -> Worst)
By Province (2000) – 3rd
1-Year Progress Check (2000) – 7th
Period Progress Rank (1991 - 2000) – 10th

How Does BC Compare?
In 2000, British Columbia had the third highest real personal disposable income per capita in Canada. In 1991, it ranked second among the provinces in absolute terms. During the 1990s, BC slipped to third place behind Alberta and Ontario but ahead of Quebec. Alberta trailed BC by $268 at the start of the decade, but by 2000 it enjoyed a $1,773 lead over BC. BC remained above the national average in real personal disposable income per person until 1998, when it began to fall behind. For 2000, the Canadian average stood at $19,606, versus BC at $19,029.

BC's poor record on this key measure reflects its weak economic performance over the entire period, and increasingly so since 1995. Recent personal income tax cuts at both the provincial and federal levels should begin to reverse the declining trend and improve BC's position.

Standard of Living
(Real Personal Disposable Income Per Capita - $1997)



Source: The Centre for Spatial Economics; Bureau of Economic Analysis and US Census Bureau

Description:

This indicator is a measure of the amount of income earned from various sources by persons after the payment of direct taxes and social insurance contributions to governments. This measure is adjusted for inflation, so it captures changes in the purchasing power of income over time. This indicator provides an indication of the relative size of per capita personal income across the geographic areas examined here.

Where BC Ranks:

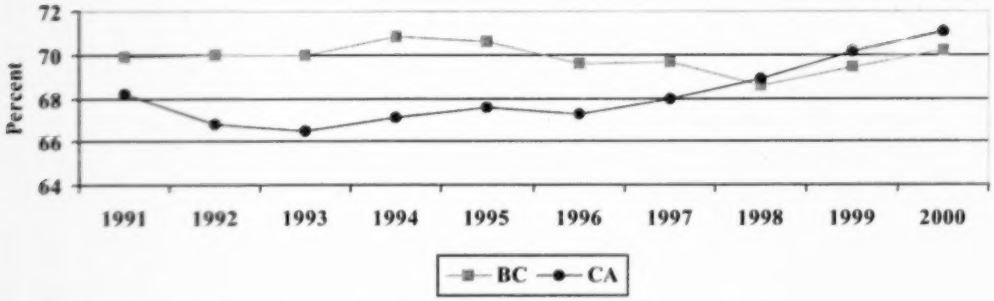
By Jurisdiction (2000) - 6
1-Year Progress Check (1999-2000) - 4
Period Progress Rank (1991-2000) - 7

How Does BC Compare?

BC ranks near the bottom in this indicator for 2000. Of the provinces, Ontario has generally had the highest real personal disposable per capita income followed by Alberta. Quebec is at the very bottom. In 2000, Ontario's real per capita disposable income was over $2,200 higher than in BC and over $3,300 higher than Quebec.

Not surprisingly, residents of California, Washington and Oregon have much higher real personal disposable incomes. These states have an overall lower tax burden. The spread between BC and Oregon – the U.S. state with the lowest real per capita income in 2000 – was over $5,200.

BC versus Canadian Average Employment Rate (Employment to Population Ratio, Age 15 to 64)



Source: BC Stats, Statistics Canada, Labour Force Survey

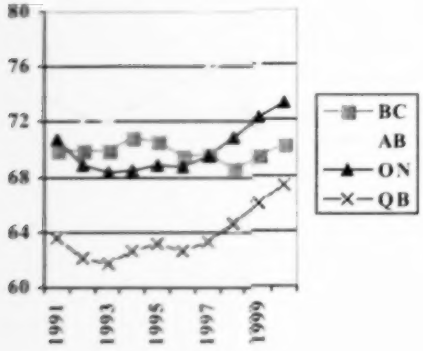
Description

This indicator shows the number of employed persons (i.e. working for pay or profit, doing unpaid work contributing to the operation of a family farm or business) expressed as a percentage of the population aged 15 to 64.

Why it's Important

The employment rate is an effective measure of the rate of labour utilization. Higher labour utilization traditionally accompanies strong economic activity.

Provincial Comparison Employment Rate (Employment to Population Ratio, Age 15 to 64)



Where BC Ranks (Best -> Worst)

By Province (2000) – **5th**
1-Year Progress Check (2000) – **6th**
Period Progress Rank (1991 - 2000) – **10th**

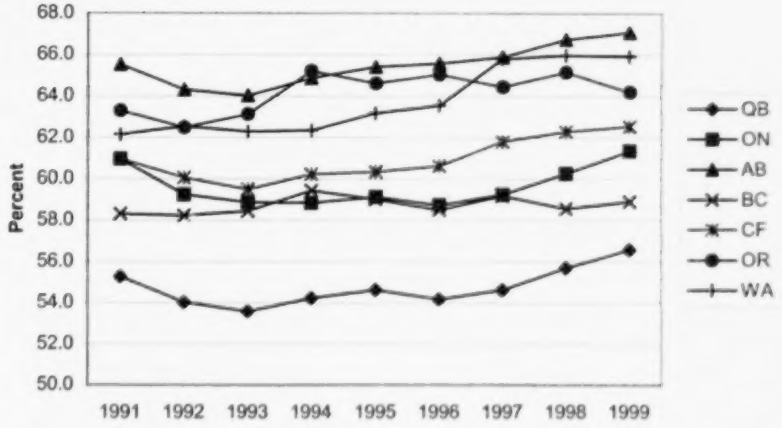
How Does BC Compare?

From 1991 to 2000, BC consistently stayed in the mid-range for the employment to population ratio in Canada. In 1991, it ranked fifth overall in Canada with a rate of 69.9%, compared to 73.7% in Alberta and 70.7% in Ontario. The Canadian average in 2000 was 71.1%, compared to 76.7% in Alberta and 73.3% in Ontario. In 2000, BC lagged behind with an employment to population ratio of 70.2%, placing it fifth overall in Canada.

Until 1998, BC had an above average employment to population ratio within Canada, but it has lagged since. The cumulative effect of strong economic performance elsewhere in Canada (especially in Ontario and Alberta), and sub-par growth in BC, is the primary reason for this result.

In recent years, the strongest growth in employment in BC occurred in the northeast region of the province, due to increased activity in the upstream oil and gas sector.

Jobs
(Employment to Population Ratio – 16 yrs. and over)



Source: The Centre for Spatial Economics; US Bureau of Labour Statistics and US Census Bureau

Description:

The employment-population ratio is the percentage of the working age population that is employed in a jurisdiction. This indicator is a general measure of the ability of a jurisdiction to create work for its population, as well as the desire of its population to participate in the labour force. The latter desire is influenced by such factors as the age distribution of the population and after-tax earnings from work, while the ability to create work is determined by the relative cost of labour and the output performance of the economy.

Where BC Ranks:

By Jurisdiction (1999) - 6
1-Year Progress Check (1998-1999) - 3
Period Progress Rank (1991-1999) - 6

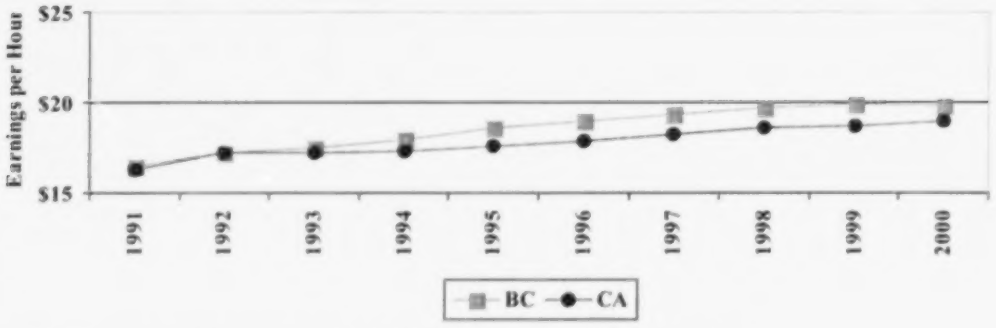
How Does BC Compare?

BC's rank for the employment-source population ratio remained near the bottom of the list relative to the three states and three provinces during the 1990s. Alberta has the highest ratio at present, and, during the period 1991-2000, generally maintained that position. From the mid 1990s onward, the employment-population ratio in BC and Oregon remained relatively constant, while in Quebec, Ontario and Alberta the ratio trended upward. The failure of the ratio to rise in BC likely reflects the relatively poor economic performance of the province during the period.

Note on Data: Government statistical agencies in Canada and the United States use different measures of the employment-population ratio. In Canada the number of persons 15 years of age and over is included for both population and employment, while in the United States the number of persons 16 years of age and over is included. While this small difference will have some impact on comparisons between the measures in the two countries, it is unlikely to result in significant differences in the ratio across the countries, other things being equal. Comparable data for the 15 – 64 age cohort was unavailable.

Performance Indicator 1 Average Hourly Earnings Economy, Innovation and Education

BC versus Canadian Average
Average Hourly Earnings



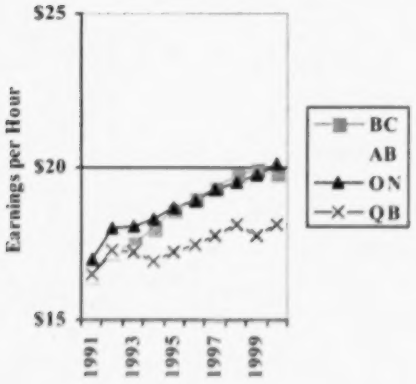
Source: Statistics Canada, Labour Force Historical Review; Centre for Spatial Economics

Description
This indicator measures average hourly wages and salaries earned by workers.

Average Hourly Earnings are based on employment payroll data from all employees in Canada for whom T4 supplementary forms are completed (except for those in agriculture, fishing and trapping, private household services, religious organizations and military service). This indicator is calculated and ranked from the worker's point of view.

Why it's Important
Average hourly earnings are a useful measure of individual prosperity. They tend to be correlated with living expenses in a jurisdiction – the higher the cost of living, the higher earnings tend to be.

Provincial Comparison
Average Hourly Earnings



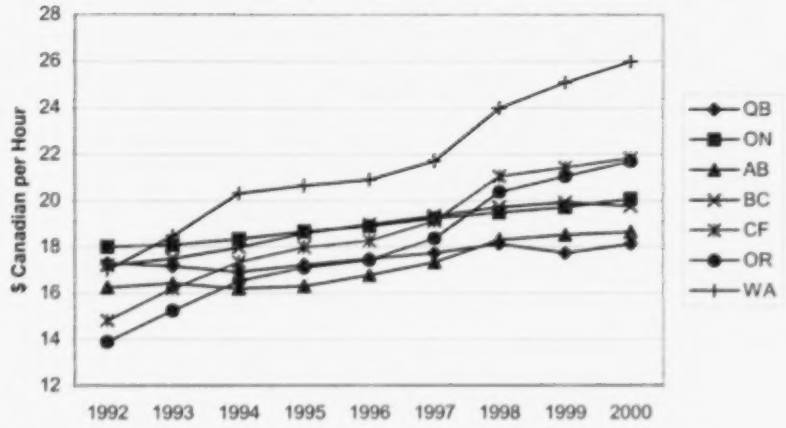
Where BC Ranks (Best -> Worst)
By Province (2000) – **2nd**
1-Year Progress Check (2000) – **10th**
Period Progress Rank (1991 - 2000) – **2nd**

How Does BC Compare?
In 1991, British Columbia ranked third in Canada with average hourly earnings of $16.44 (not adjusted for inflation). By 2000, British Columbia ranked second with average hourly earnings reaching $19.77. Ontario maintained the highest earnings during most of the decade, but BC surpassed Ontario in earnings from 1996 to 1999.

BC performed strongly in the 1990's for this indicator. From 1993 onward, it posted a second place ranking or better in Canada. Since 1996, BC's growth in average hourly earnings dwindled to the point where by 2000 it became the only province to experience a decrease.

Notes on Data: Data does not include earnings for: self-employed, agriculture, fishing and trapping, private households, religious organizations and military. Tips and commissions are also excluded.

Average Hourly Earnings



Source: The Centre for Spatial Economics; US Bureau of Labour Statistics

Description:

This indicator measures the average amount of labour income earned per employee on an hourly basis. Earnings are measured on an hourly basis to account for differences in average hours worked across the areas. From the point of view of workers, a higher wage rate in an area, other things being equal including the area's cost of living, suggests a better place to work. In the case of employers, other things being equal including labour productivity, a higher wage rate suggests a relatively high cost for doing business. The indicator is computed and ranked from the employer's point of view.

Where BC Ranks:

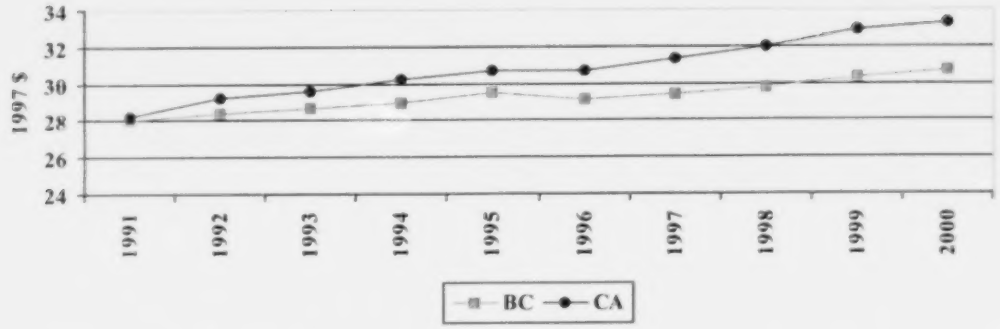
By Jurisdiction (2000) - 3
1-Year Progress Check (1999-2000) - 1
Period Progress Rank (1992-2000) - 4

How Does BC Compare?

BC's rank for this indicator is third for 2000 among all the areas. Over the 1992-2000 period the increase in BC's wage rate ranked fourth among all areas, but last among the Canadian provinces. The relatively rapid increase among the Canadian provinces suggests the largest deterioration in competitiveness for BC during the period, other things being equal. Washington and Oregon saw the fastest increase over the period, while Quebec registered the slowest increase in average hourly earnings. The relatively rapid increase in earnings in the U.S. states reflects to a great extent the sharp depreciation of the Canadian dollar over the period, which raises U.S. earnings when they are converted to Canadian dollars.

Performance Indicator 2 Productivity Economy, Innovation and Education

BC versus Canadian Average
Real GDP at Factor Cost per Hour Worked

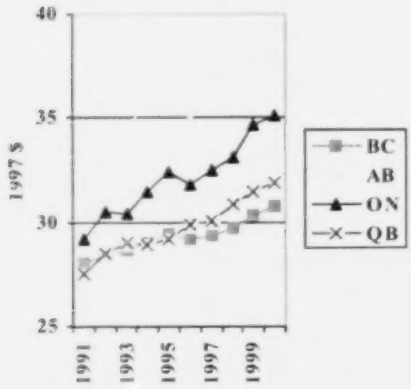


Source: Statistics Canada; BC Stats

Description

There are many different measures of productivity, but perhaps the best is real GDP per hour worked in the business sector. This is a good measure of the overall efficiency of the economy. Thus for every hour of labour in BC, workers produce a given amount of GDP.

Provincial Comparison
Real GDP at Factor Cost per Hour Worked



Why it's Important

Growth in productivity is essential to improving income levels, public services and, ultimately, the standard of living. If productivity fails to increase, a jurisdiction's living standards will eventually decline.

Where BC Ranks (Best -> Worst)

By Province (2000) – 5th
1-Year Progress Check (2000) – 4th
Period Progress Rank (1991 - 2000) – 8th

How Does BC Compare?

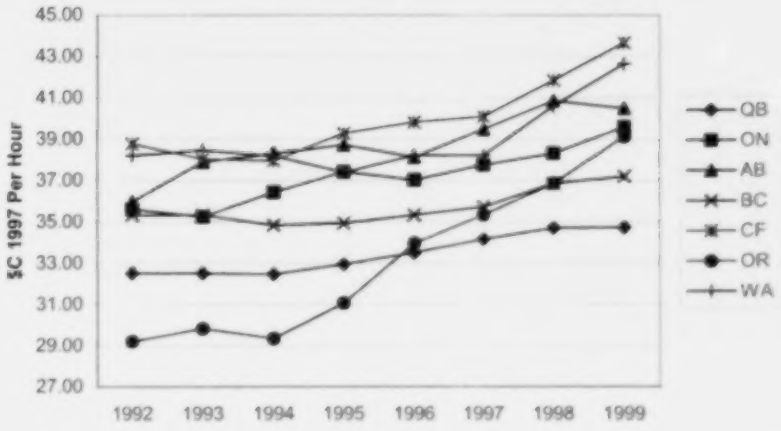
In 2000, British Columbia ranked fifth in Canada on this measure of productivity, a setback from its third place position at the start of the decade. Saskatchewan and Quebec were able to outpace BC with productivity gains of 28.5% and 15.8% respectively. Over the decade, BC posted a modest 9.4% increase in productivity, the third lowest growth rate in Canada. During the decade BC consistently performed below the Canadian average.

Throughout the 1990's, the gap between BC and Alberta also widened. In 1991, Alberta led BC in real GDP per hour by $3.95; by the end of the decade the gap had increased to $7.06. Four provinces were able to make gains on BC of $3.00 or more in real GDP per hour from 1991 to 2000.

A variety of factors likely account for BC's poor productivity record, but weak economic growth and inadequate business investment are two primary reasons.

Notes on Data: Data excludes government services, health and education, even though some are provided by the private sector.

1. Hourly Labour Productivity



Source: The Centre for Spatial Economics

Description:

Hourly labour productivity refers to the average amount of real GDP per hour worked in a jurisdiction. This indicator includes productivity for business and government services. Productivity is the major determinant of per capita real GDP and is, therefore, a key determinant of living standards. Areas with higher productivity are normally characterized by higher wage rates, other things being equal.

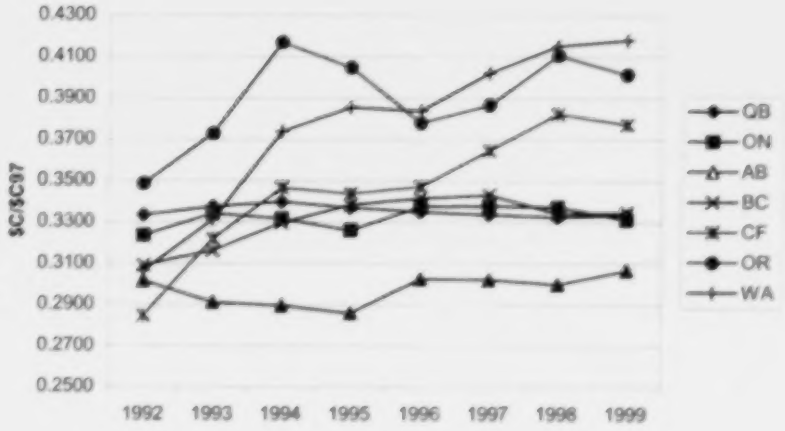
Where BC Ranks:

By Jurisdiction (1999) - 6
1-Year Progress Check (1998-1999) - 5
Period Progress Rank (1992-1999) - 7

How Does BC Compare?

BC ranks very poorly in terms of this indicator. In 1999, BC ranked sixth and its progress over the 1992-1999 period was the seventh worst among all jurisdictions. The average productivity growth over the period for all regions was about 13 per cent. BC's productivity growth was just over 5 per cent. Oregon exhibited the fastest productivity growth at almost 34 per cent. Among the Canadian provinces, Alberta registered the fastest productivity growth at just over 12 per cent. BC's productivity performance is consistent with its performance for real per capita GDP and real per capita personal disposable income.

2a. Unit Labour Costs



Source: The Centre for Spatial Economics

Description:

Unit labour costs are calculated as the ratio of average hourly earnings to real GDP. This indicator measures the relative cost of labour adjusting for wage rates and productivity. It is often used as a measure of the relative competitive position of different geographic areas. Higher unit labour costs suggest a less competitive economy. This measure computes wage rates from an employer's point of view, which impacts the conversion of U.S. wage rates to Canadian dollars. In converting U.S. wage rates, the measure uses the actual Canada-US. exchange rate rather than the Purchasing Power Parity (PPP) exchange rate, which was used for the average hourly earnings indicator.

Where BC Ranks:

By Jurisdiction (1999) - 4
1-Year Progress Check (1998-1999) - 4
Period Progress Rank (1992-1999) - 4

How Does BC Compare?

Despite relatively high wage rates and low productivity, BC ranks fourth in terms of this indicator for 1999 and fourth in the ranking for the jurisdictions in terms of its performance over the 1992-1999 period. The reason for this result is the offsetting influence of a rapidly declining Canadian dollar, which raises U.S. labour costs when measured in Canadian dollars. The highest cost jurisdiction in 1999 was Washington, while the lowest cost area was Alberta. Quebec showed the slowest increase in unit labour costs over the 1992-1999 period.

2b. Unit Labour Costs

This measure is quite often employed to compare the relative competitiveness of firms across geographic areas. It is a measure of the cost of labour per unit of production. It incorporates the average wage paid to workers along with their productivity. The following example illustrates the computation of this measure.

Suppose a hamburger business hires 5 workers each working 1400 hours per year at an hourly salary of $10. Each worker is able to produce 20 hamburgers per hour – 20 hamburgers is the hourly worker productivity. The total production of the business in a year is 20 hamburgers per hour*1400 hours per worker*5 workers = 140,000 hamburgers. Total labour costs are $10 per hour*1400 hours per worker*5 workers = $70,000. Unit labour costs for the business is therefore $70,000/140,000 = $0.50 per hamburger.

Another hamburger business across the street also has 5 workers, but pays them $11 per hour. Moreover, it has arranged its working environment to enable each worker to produce 25 hamburgers per hour. Based on these numbers its labour costs are $11 per hour*1400 hours per worker*5 workers = $77,000. Its production of hamburgers is 25 hamburgers per hour*1400 hours per worker*5 workers = 175,000 hamburgers. Unit labour costs for the firm are $77,000/175,000 = $0.44 per hamburger.

Based on these two situations it would appear that the second hamburger business has a cost advantage in terms of unit labour costs of $0.06 per hamburger. Provided it faces the same costs for materials, rents, and so on, the second firm will be able to increase its share of the hamburger business at the expense of the higher unit labour cost firm.

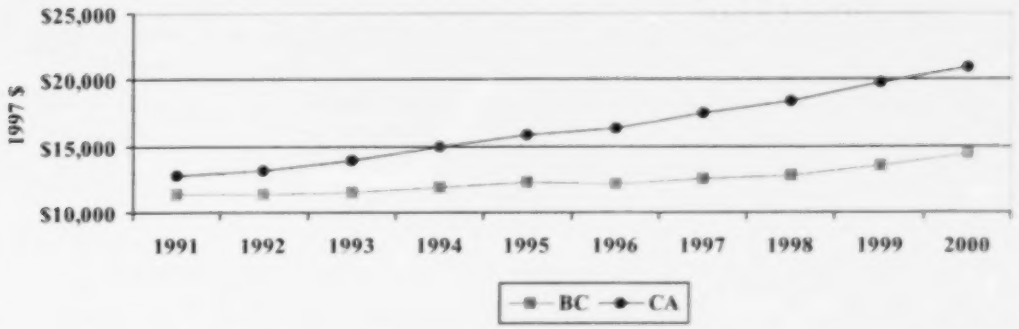
The key components of unit labour costs are hourly productivity and the hourly wage paid to workers. If another business has higher hourly productivity or is able to pay a lower wage to workers, then it will have lower unit labour costs and can earn more profit or charge a lower price and increase its market share.

The measure of unit labour cost used as a performance indicator is computed as the ratio of total wages and salaries paid to workers in the geographic area divided by real GDP for the area. The latter variable is a proxy for the total physical volume of goods and services produced in the economy – like the number of hamburgers. It is measured in $1997. Wages and salaries are measured in current dollars. Geographic areas with lower unit labour costs, other things being equal," will tend to be more competitive, and thus more successful in creating jobs and fostering economic growth.

In comparing Canadian provinces with the US states, both labour costs and real GDP in the US jurisdictions are converted to Canadian dollars in order to have a common measure. The actual exchange rate in each year is used to convert labour costs to Canadian dollars since the resulting costs are the actual ones incurred by firms operating in both countries. Only the GDP base-year (1997) value of the exchange rate is employed to convert real GDP since real GDP is measured in base year prices.

Performance Indicator 3 Total Exports per Capita Economy, Innovation and Education

BC versus Canadian Average
Total Exports of Goods and Services Per Capita



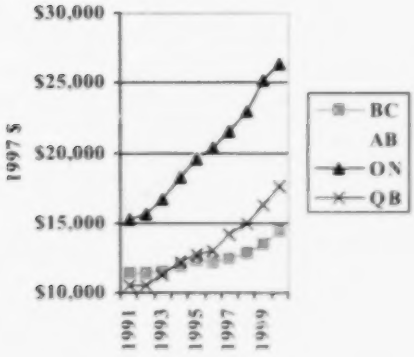
Source: BC Stats; Statistics Canada, Provincial Economic Accounts - Catalogue 13-213

Description
This indicator measures the total amount of goods and services exported to international and inter-provincial jurisdictions from Canadian provinces, on a per capita basis.

Why it's Important
Strong exports tend to aid in the expansion of productivity and income of a jurisdiction due to additional markets available beyond the domestic market.

Where BC Ranks (Best -> Worst)
By Province (2000) – 7th
1-Year Progress Check (2000) – 4th
Period Progress Rank (1991-2000) – 10th

Provincial Comparison
Total Exports of Goods and Services Per Capita



How Does BC Compare?
In 1991, BC posted total exports per capita of $11,422. By 2000, BC's exports per capita had climbed to $14,432, giving it a seventh rank among Canadian provinces. Between 1991 and 2000, BC's per capita exports increased by an annual average rate of 2.66%. This rate of growth was the lowest in Canada.

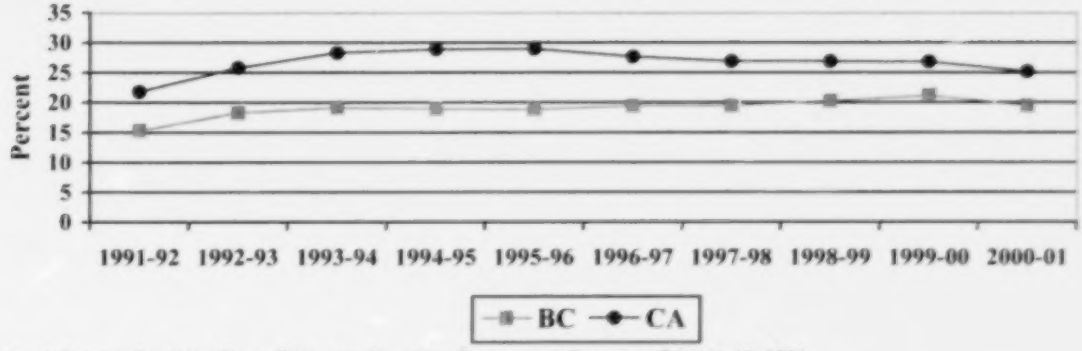
In comparison, Alberta increased its exports at an average annual rate of 4.39% over the period. This was the second lowest in Canada, but Alberta's exports in 2000 stood at $23,608 per capita, the second highest in the country.

Ontario posted the second highest average annual export growth of 6.32% between 1991 and 2000. In 2000, Ontario had the highest per capita exports in Canada at $26,321.

The gap between BC and the Canadian average has consistently widened over the decade. In 1991, the Canadian average stood at $12,806 per capita. By 2000, that figure had increased to $20,889. Canadian per capita exports rose at an annual average rate of 5.6% over the decade, more than double the growth rate for British Columbia.

Performance Indicator 4 Taxpayer Supported Debt Economy, Innovation and Education

BC versus Canadian Average
Debt % of GDP

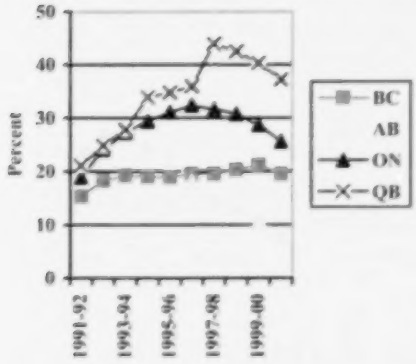


Source: Toronto Dominion Bank; Report on Canadian Government Finances, October 12, 2001

Description

The most appropriate measure of net public debt is in relation to the size of the overall economy. This indicator measures the net public debt burden as a proportion of the gross domestic product (GDP). Taxpayer supported debt includes government direct debt, and the debt of Crown corporations and agencies that require a subsidy from the provincial government.

Provincial Comparison
Debt % of GDP



Why it's Important

Payments (or interest) to service taxpayer-supported debt can consume a large portion of a jurisdiction's budget, thereby diminishing its capacity to provide public services. The debt burden is also an important indication of a jurisdiction's attractiveness for business investment.

Where BC Ranks (Best -> Worst)

By Province (2000/01) – **2nd**
1-Year Progress Check (2000/01) – **5th**
Period Progress Rank (1991/92 - 2000/01) – **6th**

How Does BC Compare?

In 2000/01, British Columbia posted the second lowest taxpayer supported debt as a percent of GDP at 19.5%, while Alberta ranked first in Canada at 7.9%. BC and Alberta are the only two provinces with taxpayer supported debt below the Canadian all-province average of 25.2% of GDP.

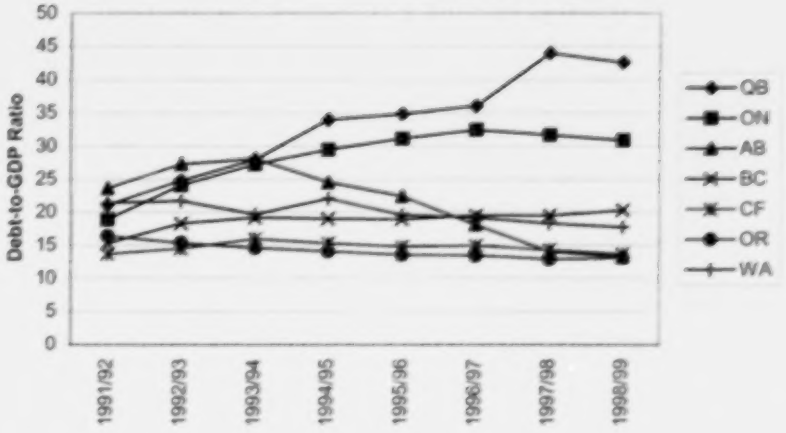
BC has seen a sizable jump in taxpayer-supported debt relative to GDP since 1991/92, when the ratio stood at 15.3%.

As of March 31, 2001, British Columbia's taxpayer supported debt was $24.9 billion, or 74% of the province's total debt burden. The remaining 26%, or $8.9 billion, of BC's public debt is self-supported debt incurred by commercial Crown corporations and agencies that carry and repay their own debt.[1]

---

[1] Source: *Debt Statistics 2000/01*. BC Government, Ministry of Finance. 2001

Taxpayer Supported Debt



Source: The Centre for Spatial Economics; US Census Bureau

Description:

Taxpayer supported debt indicates the magnitude of the public debt relative to gross domestic product and is measured by the debt-to-GDP ratio. The higher the ratio, the higher the tax burden on taxpayers. A high tax burden can inhibit growth of the economy since individuals will be left with lower after tax income. As a result, individuals hold fewer dollars to spend or invest in the economy. The public debt is a result of the accumulation of government budget deficits over the years.

Where BC Ranks:

By Jurisdiction (1998/99) – 5
1-Year Progress Rank (1997/98-1998/99) – 7
Period Progress Rank (1991/92-1998/99) – 5

How Does BC Compare?

BC ranks near (or at) the bottom in each of the three periods. Alberta scored very well in all three periods. As the graph shows, the province displayed a very large drop in its debt-to-GDP ratio from 1993/94 to 1998/99. The favorable business environment in Alberta and large tax cuts has accelerated the pace at which the province pays down its outstanding debt.

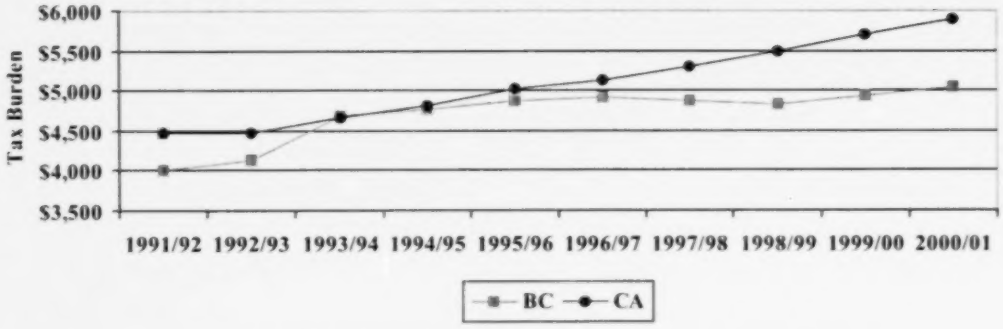
Quebec and Ontario have much higher debt-to-GDP ratios than BC. The ratio has rapidly deteriorated in Quebec to the point where the taxpayer burden has more than doubled from 1991/92 to 1998/99. The ratio has remained fairly stable in BC from 1993/94 onward.

Washington and BC exhibit a debt-to-GDP ratio that has moved together to some degree over time. Oregon and California have always had a lower ratio than BC.

Performance Indicator 5 Per Capita Tax Burden Consolidated Provincial and Local

Economy, Innovation and Education

BC versus Canadian Average Per Capita Tax Burden



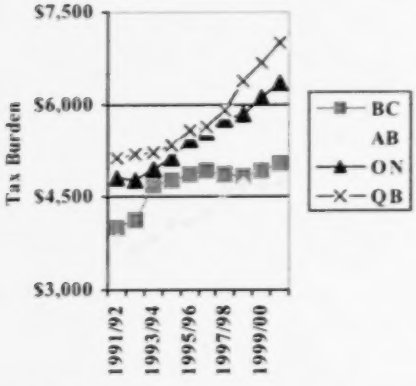
Source: BC Stats; Statistics Canada Public Institutions Division. Financial Management System Data.

Description

This indicator represents the combined tax burden from local and provincial sources, expressed on a per person basis.

It includes, on a per capita basis, income taxes, consumption taxes, health insurance premiums, contributions to social insurance plans and other taxes (including payroll fees, fees for motor vehicle licences, natural resource taxes and licences and other miscellaneous taxes).

Provincial Comparison Per Capita Tax Burden



Why it's Important

This indicator is a good summary measure of the "total" provincial and local tax burden, and along with other factors such as the regulatory burden, infrastructure quality, and access to quality health care and education, can help to determine business location and investments decisions.

Where BC Ranks (Best -> Worst)

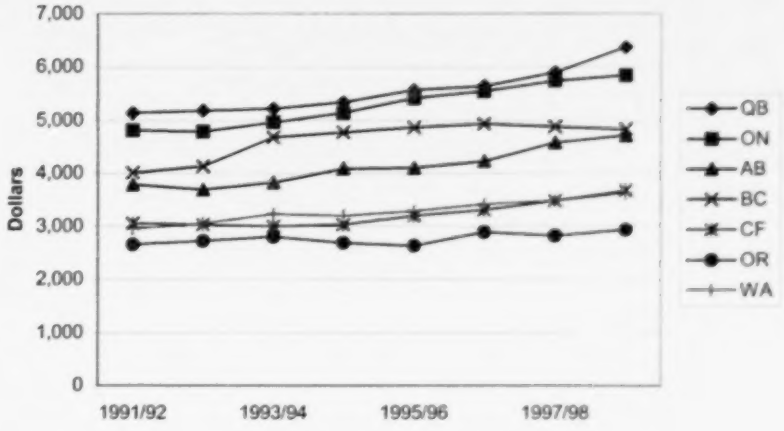
By Province (2000/01) – **7th**
1-Year Progress Check (2000/01) – **6th**
Period Progress Rank (1991/92 -2000/01) – **3rd**

How Does BC Compare?

BC posted the fourth highest consolidated provincial and local government tax burden in Canada at $5,054 in 2000/01. From 1991/92 onward, BC experienced a 26% increase in the per capita tax burden from these two levels of government, the third smallest increase in the country. Throughout the decade, BC stayed below the national average on this indicator of tax burden. Since the mid-nineties the gap between BC and the national average has widened. In 2000/01, the Canadian average was $5,902, $848 more than in BC. However, Alberta has consistently had a lower consolidated provincial and local tax burden than BC.

From 1991/92 to 2000/01, BC saw the consolidated provincial and local government per capita tax burden rise by $1,042. In comparison, Alberta recorded an increase of $948, and Ontario posted an increase of $1,531.

Per Capita Tax Burden – Consolidated Provincial (State) and Local Government



Source: The Centre for Spatial Economics; US Census Bureau

Description:

Per capita tax burden looks at the burden of combined provincial (state) and local taxes distributed on a per person basis.

Where BC Ranks:

By Jurisdiction (1998/99) – 5
1-Year Progress Check (1997/98-1998/99) – 1
Period Progress Rank (1991/92-1998/99) – 3

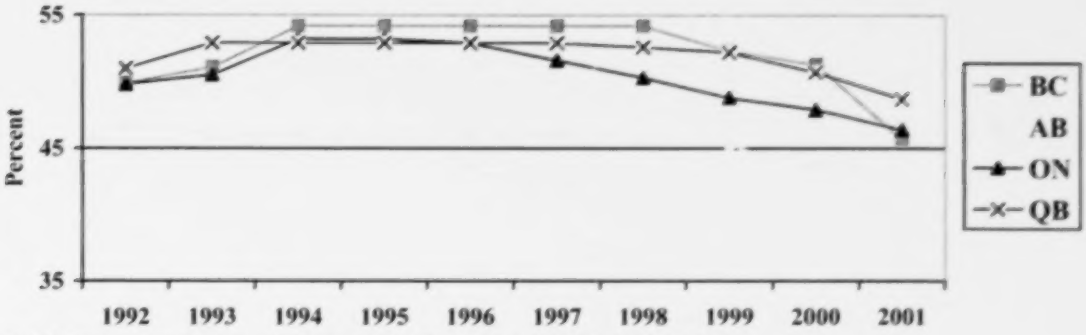
How Does BC Compare?

BC's combined tax burden gives the province an unfavorable ranking when compared with Alberta or US states like Oregon. In 1998/99, the per capita tax burden in BC was $1,887 higher than Oregon.

When compared to Ontario and Quebec, BC fares quite well. The tax spread between Quebec and BC on a per capita basis is a very favorable $1,500. The spread between BC and Alberta in 1998/99 was about $118. Recent cuts to the BC provincial tax rate may help widen the tax spread in BC's favor even further.

Performance Indicator 6 — Top Marginal Personal Income Tax Rate — Economy, Innovation and Education

Provincial Comparison
Top Marginal Income Tax Rate



Source: BC Government; Ministry of Finance (Economic and Fiscal Update, Table 3.3)

Description

The top marginal personal income tax rate is the combined federal-provincial income tax rate levied on the highest income bracket. The top rate takes effect at various income thresholds as noted in the box below.

Why it's Important

The top marginal (combined federal and provincial income tax) rate is key factor in a jurisdiction's ability to attract and retain highly skilled workers. High marginal tax rates tend to discourage additional work effort and lessen the growth of real GDP. They may also discourage investment and increase the cost of living, other things being equal, since less income is available for savings and consumption.

Where BC Ranks (Best -> Worst)

By Province (2001) – **3rd**
1-Year Progress Check (2001) – **1st**
Period Progress Rank (1992 - 2001) – **4th**

How Does BC Compare?

In 1992, BC had the third lowest federal-provincial combined top marginal personal income tax rate in Canada at 49.9%. Alberta then had the lowest top marginal tax rate at 46.7%, while Saskatchewan had the highest at 52.4%.

From 1994 to 1998, BC had the highest marginal income tax rate in Canada at 54.2%. Newfoundland was the closest province to BC with a rate of 53.3% between 1996 and 1998.

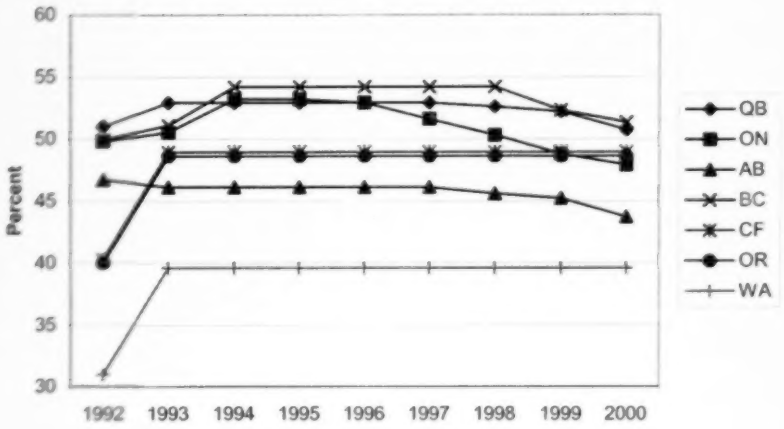
In 2001, BC's marginal tax rate stood at 45.7%, (by then the third lowest in the country), with Alberta and Saskatchewan having lower rates of 39% and 45% respectively. BC dropped its top marginal income tax rate to 43.7% beginning on January 1, 2002. Assuming no changes in other provinces' tax policies, BC's top marginal rate will be the second lowest in Canada in 2002.

Federal and Provincial Top Marginal Tax Rates for Individuals - 2001

	BC	AB	SK	MB	ON	QB	NB	NS	PE	NF	Federal
Tax Rate	16.7%	10.0%	16.0%	17.4%	11.16%	24.5%	17.84%	16.67%	16.7%	18.02%	29.0%
Income Bracket	$85,001 and over	All income	$60,001 and over	$61,090 and over	$61,630 and over	$52,001 and over	$100,000 and over	$59,181 and over	$61,510 and over	$59,181 and over	$100,000 and over

Source: KPMG. October 1, 2001.

Top Marginal Personal Income Tax Rate



Source: The Centre for Spatial Economics; Internal Revenue Service

Description:

The top marginal personal income tax rate is the rate levied on individual taxpayers for every additional $1 of income earned. High tax rates discourage work effort and thereby reduce potential GDP. In addition, they make an area a less desirable place to live and invest, other things being equal, since less income after tax is available for consumption and saving.

Where BC Ranks:

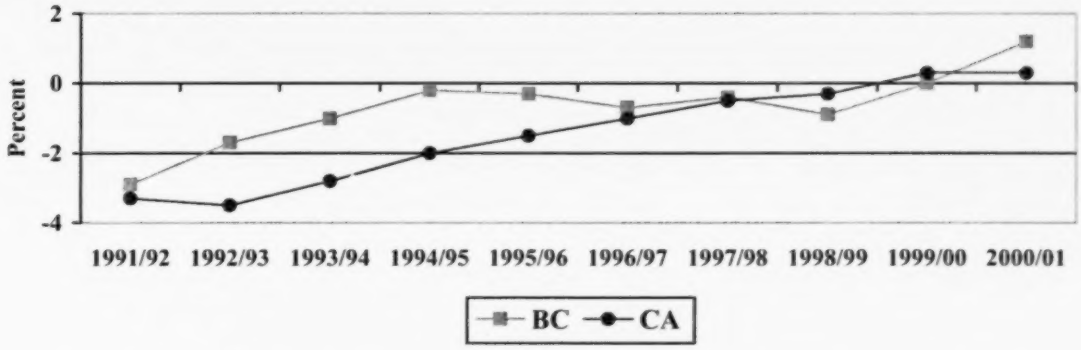
By Jurisdiction (2000) – 7
1-Year Progress Check (1999-00) – 3
Period Progress Rank – (1992-2000) – 4

How Does BC Compare?

From 1994 until 2000 British Columbia had the highest top marginal income tax rate. Alberta has always maintained a lower combined rate while Ontario has aggressively cut the provincial portion since the mid 1990s. The top marginal personal income tax rate has remained constant since 1993 for each of California, Oregon and Washington. The spread between BC and Washington peaked in 1992 when it was nearly 19 points, but this trend has drastically improved. Washington does not levy a state level income tax, thus giving it an advantage over the jurisdictions in question. In 2000, the spread between BC-California as well as BC-Oregon was about 2.5 points each. US top marginal rates trigger at income thresholds well above those for Canadian provinces (detailed on previous page).

Performance Indicator 7 — Provincial Deficit/ Surplus Levels — Economy, Innovation and Education

BC versus Canadian Average
Surplus/Deficit % of GDP

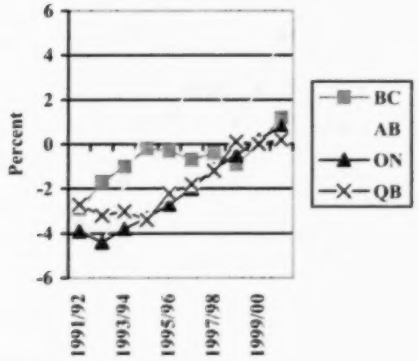


Source: Toronto Dominion Bank; Report on Canadian Government Finances, October 12, 2001, & September 6, 2000

Description

This indicator is a simple measure of whether a provincial government is in a deficit/surplus position relative to the Canadian average (and other provinces), expressed as a percentage of GDP.

Provincial Comparison
Surplus/Deficit % of GDP



Why it's Important

Over time, successive deficits will increase the total debt level. Large portions of provincial budgets may then be required to finance accumulated debts burdens with money that could be spent on priority government programs or used to lower taxes.

Where BC Ranks (Best -> Worst)

By Province (2000/01) – 3rd
1-Year Progress Check (2000/01) – 5th
Period Progress Rank (1991/92 - 2000/01) – 4th

How Does BC Compare?

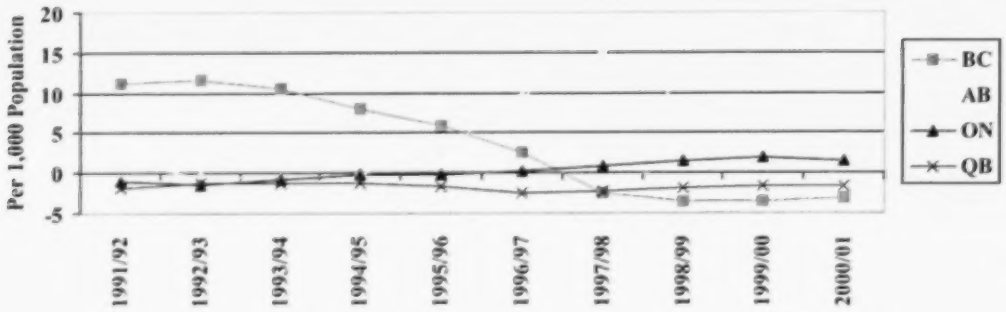
In 1991, BC had a deficit equivalent to 2.9% of GDP. The all province average in 1991 was a deficit of 3.3% of GDP. By 2000, BC posted a modest turnaround in its fiscal position, with a surplus equivalent to 1.2% of GDP. BC ran successive budget deficits between 1991/92 and 1999/00, before posting a surplus in fiscal year 2000/01 buoyed by sharp (and temporary) "spikes" in electricity trade and natural gas revenues.

In 1991, Alberta recorded a provincial deficit of 3.6% of GDP. Alberta moved into a surplus position in fiscal year 1994/95, and has remained there since. By 2000, it enjoyed a surplus of 4.9% of GDP. In 2000, the all-province average was a surplus amounting to 0.3% of GDP. BC is on course to post a deficit in fiscal year 2001/02 approaching $2 billion.[2]

[2] Source: *Second Quarterly Report on the Economy, Fiscal Situation and Outlook*. Government of British Columbia, Ministry of Finance. September 2001.

Performance Indicator 8 — Net Inter-Provincial Migration — Economy, Innovation and Education

Provincial Comparison
Net Interprovincial Migration Per 1,000 Population



Source: BC Stats; Statistics Canada, Annual Demographic Statistics, Catalogue 91-213 XPE

Description
Net inter-provincial migration shows the movement of Canadians from one province to another, expressed on a per 1,000 population basis.

Why it's Important
Net inter-provincial migration can serve as an indicator of a jurisdiction's relative attractiveness as a place to invest and work. It is also an important contributing factor to economic growth and in expanding the pool of young and highly skilled workers that is critical to growing BC's economic base.

Historically, there tends to be a linkage between interprovincial migration flows and the relative economic strengths and weaknesses of a given jurisdiction.

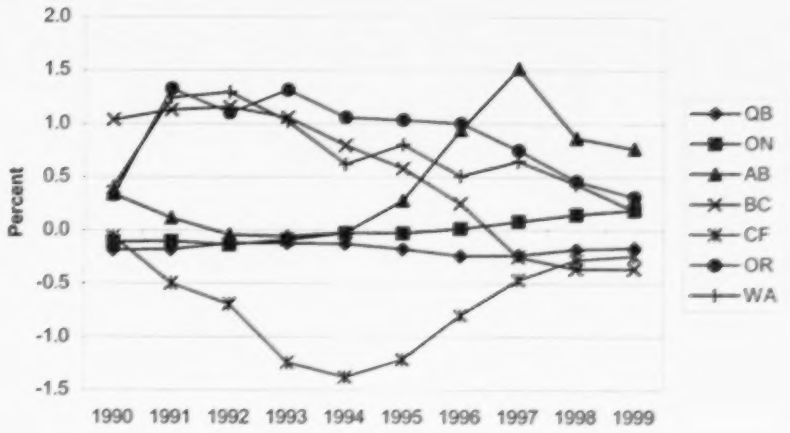
Where BC Ranks (Best -> Worst)
By Province (2000/01) – **8th**
1-Year Progress Check (2000/01) – **3rd**
Period Progress Rank (1991/92 - 2000/01) – **8th**

How Does BC Compare?
From 1991/92 to 1993/94, BC experienced a large net inflow of population due to inter-provincial migration. The majority of other provinces experienced net outflows of people to BC during this period. BC's inter-provincial intake peaked in 1992/93 at 11.55 people per 1,000 population, but a decline began in 1994/95. At the same time as BC began to experience a decline in provincial intake, Alberta and Ontario saw rising net inflows from other provinces. From 1997/98 to 2000/01, BC lost more people, on a per 1,000 population basis, to other provinces.

From 1991/92 to 2000/01, BC posted an annual average increase of 3.68 people per 1,000 population from other provinces, due to the high rate of interprovincial intake experienced during the first half of the decade. This is the second highest level in Canada; Alberta led Canada with an average annual increase of 5.22 people per 1,000 population over the period.

Over the decade, BC recorded a net increase in population of 125,358 people from other provinces, with the lion's share of this taking place up during the first half of the decade. In comparison Alberta led Canada with an overall net increase of 150,256 people during the decade, with most of its growth coming in the second half of the decade.

Net Inter-Provincial (Inter-State) Migration



Source: The Centre for Spatial Economics; US Census Bureau

Description:

This measure presents net inter-provincial (inter-state) migration adjusted for the size of the population of the respective province (state). A ratio above zero indicates a net addition to the population. The province (state) is seen as a relatively attractive location to live and work if it has a high value for this indicator. A ratio below zero indicates a net decline in the population. In this case the province (state) is seen as a less desirable place to live and work.

Where BC Ranks:

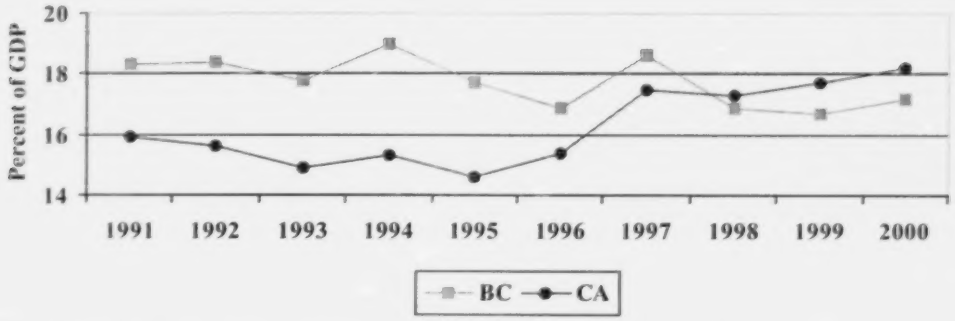
By Jurisdiction (1999) – 7
1-Year Progress Check – 2
Period Progress Rank (1990-99) – 6

How Does BC Compare?

BC has shown a downward trend in net in-migration since the early 1990s, falling below zero in 1997. While Washington and Oregon have seen their net inter-state migration levels decline, it remained positive during the period. Since 1995, both Alberta and Ontario have seen net inter-provincial migration increase. California and Quebec observed a net outflow of people during the entire 1990s.

Performance Indicator 9 — Business Gross Fixed Capital Formation — Economy, Innovation and Education

BC versus Canadian Average
Business Gross Fixed Capital Formation
% of GDP
(1997 $)



Source: BC Stats; Statistics Canada, Provincial Economic Accounts - Catalogue 13-213

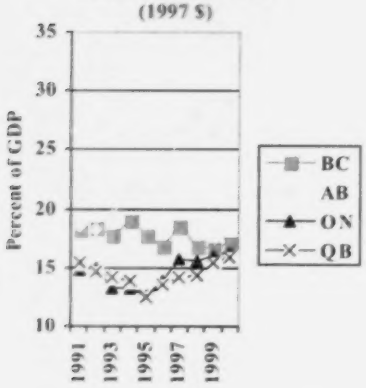
Description

This indicator measures the total amount of fixed business investment as a percent of GDP in every province.

It reflects the expenditure by businesses on durable assets and on building and engineering construction. Also included is residential construction by individuals, alterations and improvements made to the stock of buildings, and transfer costs paid on the sale of existing assets.

Factors such as input costs, market conditions, expected rates of return, and government fiscal policy determine a jurisdiction's attractiveness for fixed business investment.

Provincial Comparison
Business Gross Fixed Capital Formation % of GDP
(1997 $)



Why it's Important

Business investment is perhaps the most important factor contributing to long-term economic growth and higher productivity. Without solid business investment, significant or sustained employment growth is unlikely. Periods of strong business investment are generally followed by faster economic growth and rising incomes.

Where BC Ranks (Best -> Worst)

By Province (2000) – **6th**
1-Year Progress Check (2000) – **4th**
Period Progress Rank (1991 - 2000) – **10th**

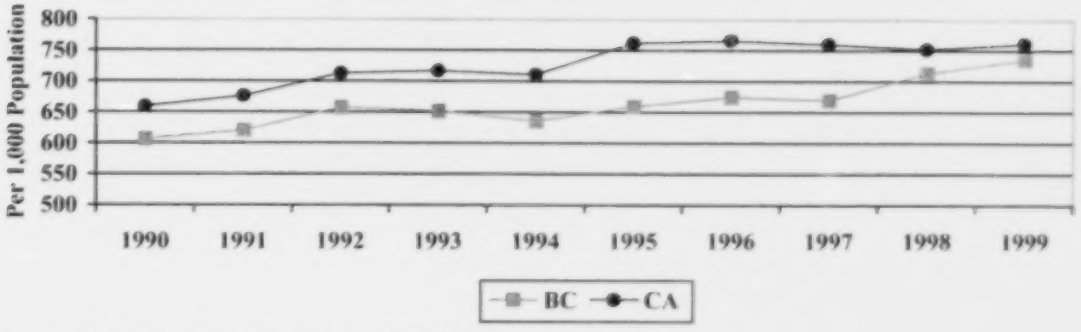
How Does BC Compare?

In 2000, business gross fixed capital formation was equal to 17.2% of BC's GDP. The Canadian average was 18.2%, while Alberta led the pack with investment equal to 29.3% of GDP.

In 2000, BC saw an increase of 3.2% in total fixed business investment as a percent of GDP over the previous year. This was the fourth highest increase in Canada, with the national average registering a 2.9% increase. Alberta recorded the strongest growth in fixed business investment relative to GDP with an 11.1% increase over the previous year.

Performance Indicator 10 — Secondary School Graduates — Economy, Innovation and Education

BC versus Canadian Average
Secondary School Graduates
per 1,000 population Aged 18 Years

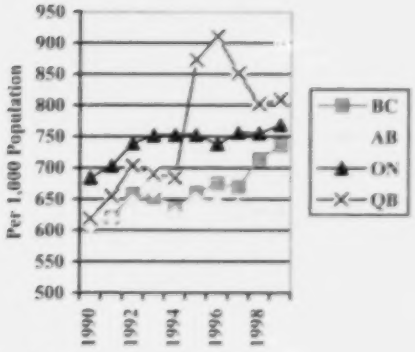


Source: BC Stats; Statistics Canada (Catalogue 81-229)

Description

This indicator measures the number of secondary school graduates per 1,000 population aged 18 years (at July 1 each year). For graduation, the year indicated is the end of the academic year.

Provincial Comparison Secondary School Graduates per 1,000 Population Aged 18 Years



Why it's Important

Levels of education tend to correlate strongly with future personal prosperity and well-being. With the "knowledge" content of most jobs steadily increasing, high school graduation or better is generally deemed essential as a base qualification for other "higher learning" and entry level employment.

Where BC Ranks (Best -> Worst)

By Province (1999) – **9th**
1-Year Progress Check (1999) – **1st**
Period Progress Rank (1990 - 1999) – **3rd**

How Does BC Compare?

In 1990, BC tied with Alberta for the lowest number of secondary school graduates per 1,000 population aged 18 years at 607. Ontario had 684 gradates per 1,000 population, Quebec had 619, and the Canadian average was 659.

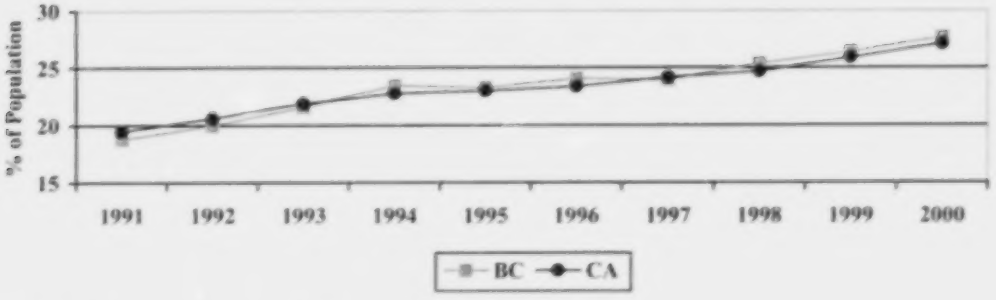
By 1999, the number of secondary graduates in BC had grown by 21.2% to 736 per 1,000 population aged 18 years, the second largest increase in Canada. Alberta had 632 graduates while Ontario had 769. The Canadian average was 761 graduates per 1,000 population in 1999.

Notes on Data: Secondary schools include public, private and federal schools and schools for the visually and hearing impaired, as well as schools overseas. Secondary graduations for Quebec include graduates from adult and trade/vocational programs.

Equivalencies and "General Education Diplomas" are excluded as well as night school and correspondence courses for Ontario adults.

Performance Indicator 11 University Completion Economy, Innovation and Education

BC versus Canadian Average
% of Population Aged 25 to 54 with University Completion



Source: BC Stats; Statistics Canada, Labour Force Survey.

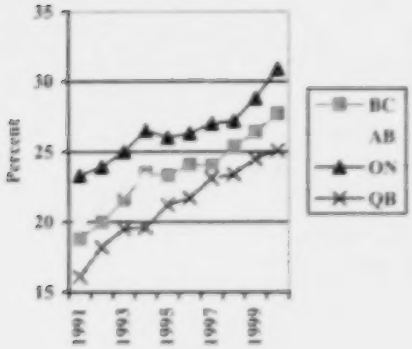
Description

This indicator measures the percentage of the population aged 25 to 54 that has attained university education.

Why it's Important

Although there are many different forms of post-secondary credentialing, university completion is an important indication of a jurisdiction's success in building the high level academic, managerial and entrepreneurial skills necessary in today's knowledge driven economy.

Provincial Comparison
% of Population Aged 25 to 54 with University Completion



Note on Data: Excluded from this measure are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve month survey results.

Where BC Ranks (Best -> Worst)

By Province (2000) – **2nd**
1-Year Progress Check (2000) – **4th**
Period Progress Rank (1991 - 2000) – **2nd**

How Does BC Compare?

In 1991, 18.8% of BC's population had completed a university education, the fifth highest in Canada. This compared with Alberta at 20.0%, Ontario at 23.3%; the Canadian average in 1991 was 19.5%.

By 2000, BC had increased its ranking to second in Canada with 27.7% of the 25 to 54 population having a university education. Alberta had increased to 23.6%, Ontario to 30.9% and the Canadian average stood at 27.1%. A large proportion of BC's improvement is traceable to in-migration of persons who obtained a university degree outside of the province.

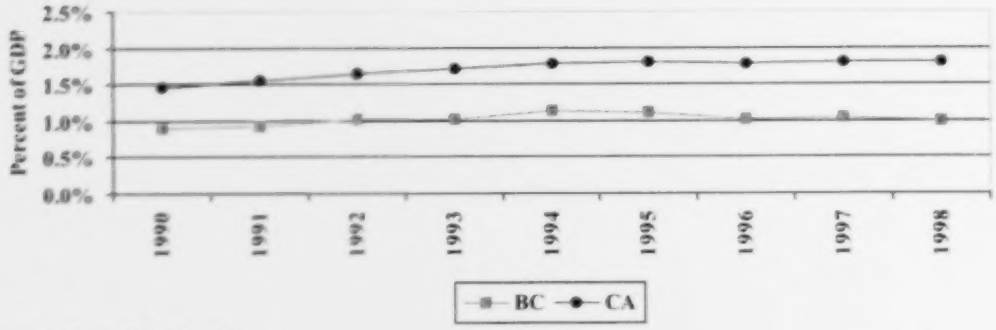
Access to university education in BC has historically been low. In the early 1990s BC's university completion rate, measured by the number of baccalaureate degrees awarded for the 18 – 24 age cohort, was 65% of the national average. The establishment of three new universities, five university-colleges and two other degree granting institutions has increased the province's degree granting capacity. In 1998, BC improved to 80% of the national average. BC has also trailed in the number of degrees granted in key areas such as engineering, medicine, education, business and computer science.[1]

[1] Statistics Canada; The BC University Presidents' Council, TUPC Report, p.5

Performance Indicator 12 — Research and Development as a Percentage of GDP

Economy, Innovation and Education

BC versus Canadian Average
R&D Spending as a % of GDP



Source: BC Stats, Statistics Canada

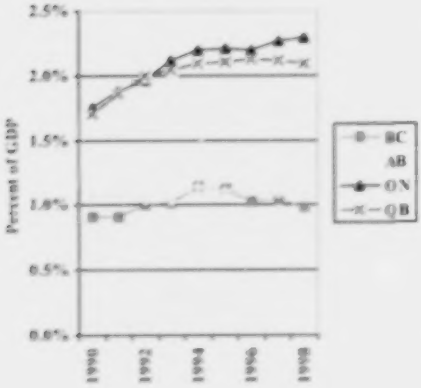
Description

This indicator measures how much is spent on research and development in relation to GDP. It includes the sum of expenditures reported by (or estimated for) the various sectors involved in research and development – government, business, higher education and not-for-profit organizations.

Why it's Important

Spending on research and development (R&D) is a key factor in innovation and the creation of new wealth.

Provincial Comparison
R&D Spending as a % of GDP



Where BC Ranks (Best -> Worst)

By Province (1998) – 6th
1-Year Progress Check (1998) – 9th
Period Progress Rank (1990 - 98) – 6th

How Does BC Compare?

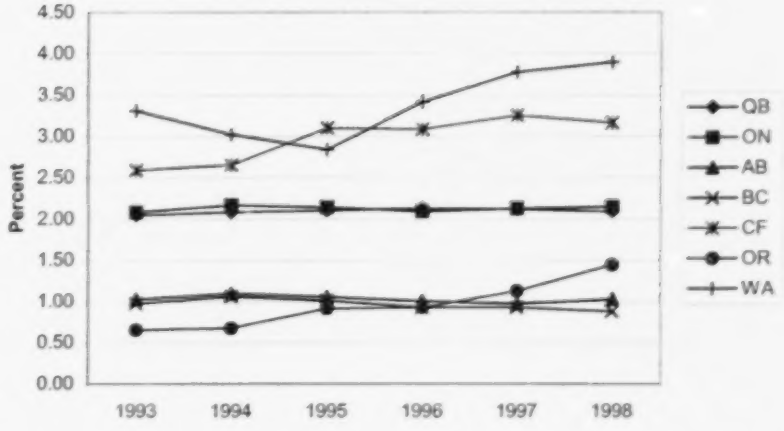
In 1998, 0.87% of BC's GDP was spent on research and development, the fifth lowest in Canada. This figure is well below the Canadian average of 1.66%, with the gap between BC and the rest of Canada widening slightly over time.

Only two provinces, Ontario and Quebec, actually increased their spending on R&D relative to GDP during the 1990s, posting increases of 16.7% and 21.3%, respectively.

BC's poor record in this area reflects, in part, a smaller manufacturing and high tech sector than in central Canada, along with lower per capita federal spending in this area compared to Quebec and Ontario.

In 1998, nearly $4.1 billion was expended on R&D in Quebec, compared to $1.01 billion in BC and $1.1 billion in Alberta. Ontario led the way with $8 billion in that year.

Research and Development as a Percent of GDP



Source: National Science Foundation - Source: The Centre for Spatial Economics; National Science Foundation

Description

This measure is the ratio in percentage terms of research and development expenditures to GDP. Economies with higher levels of research and development will experience more rapid economic growth as new products are developed along with processes that increase the economy's level of productivity.

Where BC Ranks

By Jurisdiction (1998) – 7
1-Year Progress Check (1997-1998) – 7
Period Progress Rank (1993-1998) – 7

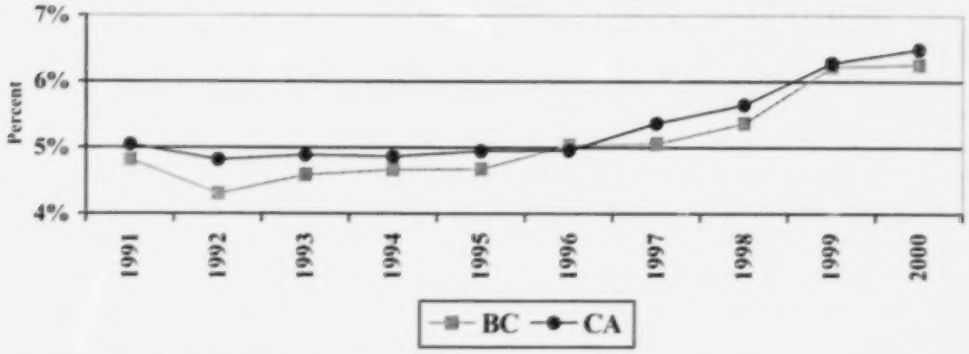
How Does BC Compare?

Under all three rankings, BC is at the bottom for this indicator. The province exceeded Alberta and Oregon until 1996, when BC began displaying a downward trend in research and development relative to GDP. In Ontario, Quebec, and Alberta, research and development as a percent of GDP remained steady over the 1993-98 period. In Washington and Oregon, the indicator drifted upward after 1994. California's indicator jumped in 1995, but remained essentially unchanged thereafter.

Performance Indicator 13 — Natural and Applied Science and Related Occupations

Economy, Innovation and Education

BC versus Canadian Average
% of Labour Force



Source: BC Stats; Statistics Canada, Labour Force Survey

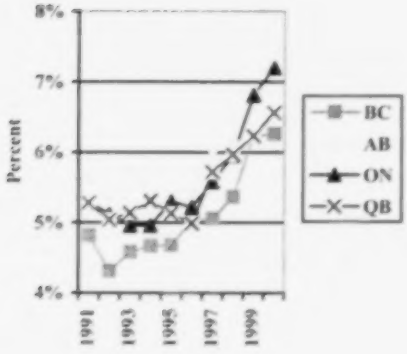
Description

This indicator shows the percentage of a jurisdiction's workforce comprised of persons employed in natural and applied science related occupations. Included in this category are occupations in the physical sciences, engineers, architects, mathematicians, systems analysts, and programmers and associated technical occupations.

Why it's Important

The number of scientists and engineers relative to the labour force is one indication of a jurisdiction's success in attracting people who possess knowledge and skills essential to process of innovation and wealth creation.

Provincial Comparison
% of Labour Force



Where BC Ranks (Best -> Worst)

By Province (2000) – 4th
1-Year Progress Check (2000) – 6th
Period Progress Rank (1991 - 2000) – 3rd

How Does BC Compare?

From 1991 to 2000, there were steady increases in the number of scientists and engineers as a proportion of the labour forces throughout the country. In 2000, 6.3% of British Columbia's labour force was comprised of scientists and engineers, up from 4.8% in 1991. This marked the third biggest increase in Canada over the 1990s.

Despite this, BC remained below the Canadian average on this indicator throughout the decade. But it did manage to make gains on Alberta in terms of the pace of progress, even though Alberta had the highest number of scientists and engineers as a proportion of the labour force over much of the 1990's.

Note on Data:
Persons in institutions, full-time members of the Armed Forces and persons living on Indian Reservations are excluded. Annual numbers are the average of 12 monthly survey results.

IV. Environment, Health and Society

Overview

British Columbia has a somewhat mixed record on the various measures of environment, health and social condition covered in this report. In this broad area, the three key "target" variables chosen by the Progress Board are environmental quality, life expectancy at birth, and low income incidence.

Environmental quality is measured by averaging provincial rankings for the four environmental performance indicators included in this report: urban air quality; greenhouse gas emissions per capita; wastewater treatment; and, protected areas. BC leads the provinces on this "core target", ahead of second place Ontario and third place Manitoba, buoyed by its strong record of improvement on wastewater treatment, protected areas and air quality.

Closer examination of the environmental indicators included for comparison reveals that Vancouver, the province's largest metropolitan center, ranked second among eight Canadian cities in 2000 for having the lowest concentrations of fine particulates (PM_{10}) in the air; this indicator has become a standard measure of air quality. Vancouver also had the second lowest concentrations of PM_{10} in that year when judged against seven other major North American cities (Toronto, Montreal, Ottawa, Edmonton, Seattle, Portland, and Los Angeles). Air quality has direct implications for human health, as higher concentrations of fine particulates are known to aggravate respiratory problems and contribute to cardiovascular disease (among other things).

By Canadian standards, British Columbia has a favourable record on emissions of greenhouse gases per person. In 1999, it recorded the third lowest level of per capita greenhouse gas emissions in the country at 15.8 tonnes, substantially below the national average of 22.8 tonnes. Over the period 1990 to 1999, BC had the second best record among the provinces in lowering/containing emissions, although in absolute terms its per capita emissions dropped by only 6.3%.

British Columbia has made notable strides on wastewater management, by sharply increasing the portion of its population served by sewers that have secondary/tertiary treatment facilities. In 2000 BC placed fifth in Canada in the percentage of population having secondary or better treatment, and it outdistanced all other provinces in improvement in this area from 1991 to 1999. However, the three prairie provinces and Ontario have over 90% of their population served by secondary or better treatment facilities compared to only 63% in the case of BC. On parks and protected areas, BC leads Canada – indeed, it is first in North America – in the proportion of land set aside for this purpose, at 13.1%, compared to a national average of 7.3% and 12.5% in next-door Alberta.

Turning to health status, our core target is Life Expectancy at Birth, measured using Statistics Canada's standard indicator, which is based on current mortality rates. BC ranked first in Canada as of 1998, the last year for which data is available. During the 1990s, BC

was also first in the country in "progress," with life expectancy reaching 79.5 years in 1998, up from 78.1 years at the start of the decade. Female life expectancy was 82.1 years, compared to a Canadian average of 81.5 years. Male life expectancy was somewhat lower at 77 years, but this was still better than the Canadian average of 76.1 years in 1998.

On other common health indicators, British Columbia scores well on "cancer mortality," with the third lowest mortality rate in the country. Among the ten provinces, it ranked fourth on progress in reducing cancer mortality between 1990 and 1997. On the incidence of "low birth weight" births, an internationally recognized indicator of health and social condition, BC had the second best performance in Canada as of 1998 and ranked third in improvement from 1990 to 1998. In 1998, 5.1% of all live births in BC weighed less than 2,500 grams, compared to the national average of 5.8%.

Our Low Income Incidence target is based on Statistics Canada's "unofficial low income cut off" level, or LICO. In 1999 BC stood sixth among the provinces in the proportion of families and unattached individuals classified as "low-income" (16.1%); this was slightly higher than the national average of 15.8%. Over the period 1991 to 1999, BC ranked seventh in Canada in progress on this core target. The "low-income cut-off" is defined by Statistics Canada as the percentage of the population that spends 54.7% or more of after-tax income on the basics of food, shelter and clothing. Some commentators and scholars have argued that LICO is flawed as an estimate of the prevalence of poverty, but it is included in this report because of its widespread use by Canadian researchers and government agencies and because suitable alternative measures are not available.

Finally, on our other measure of social condition. British Columbia scores poorly in a Canadian context on many measures of crime. In 2000, it was burdened with the country's highest combined personal and property crime rate per 100,000 people, with the vast majority of reported incidents falling in the "property crime" category. BC had 7,619 crime incidents per 100,000 people in 2000, versus a national average of only 5,049. Despite this poor showing, BC has experienced a 26.8% drop in combined personal/property crime rates since 1991. And among the provinces, it had the fourth best record of reducing crime rates over the period.

Targets and Performance Indicators

Goal

Make BC a leader in Canada on environmental quality, health outcomes and social condition by 2010.

Targets

4. **Environmental Quality**: target 1st in Canada for environmental quality by 2010.
5. **Life Expectancy at Birth**: target 1st in Canada for life expectancy at birth by 2010.
6. **Low Income Incidence**: target 1st or 2nd in Canada for having the smallest percentage of families and unattached individuals living below the "low income cut-off" level by 2010.

Performance Indicators

14. Air Quality
15. Greenhouse Gas Emissions
16. Wastewater Treatment
17. Protected Areas
18. Cancer Mortality
19. Low Birth Weight
20. Personal and Property Crime

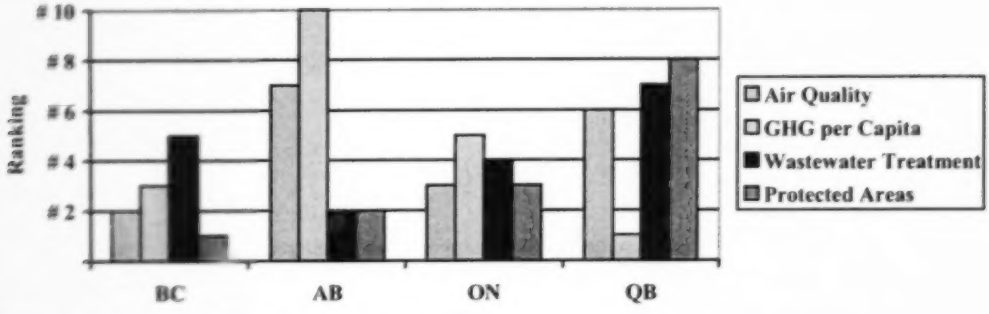
Note on Table (next page): An Arithmetic Average and "Indicative Overall Rank" are provided for summary comparison purposes only. Each Target and Performance Indicator should be viewed independently with more emphasis being placed on the three "Target" measures.

Where BC Ranks

Environment, Health and Society												
	4. Environmental Quality	5. Life Expectancy at Birth	6. Low Income Incidence	14. Air Quality	15. Greenhouse Gas Emissions	16. Wastewater Treatment	17. Protected Areas	18. Cancer Mortality	19. Low Birth Weight	20. Personal and Property Crime	Arithmetic Average	Overall Indicative Rank
By Province (last available data year)												
Year		1998	1999	2000	1999	1999	2001	1997	1998	2000		
BC	**1**	**1**	**6**	**2**	**3**	**5**	**1**	**3**	**2**	**10**	**3.40**	**1**
AB	4	3	5	7	10	2	2	2	10	7	5.20	5
SK	4	4	2	5	9	1	6	1	3	9	4.40	4
MB	3	6	8	4	6	3	4	6	6	8	5.40	6
ON	2	2	4	3	5	4	3	5	8	4	4.00	2
QB	7	5	10	6	1	7	8	9	9	5	6.70	8
NB	9	6	3	4	8	6	10	7	4	3	6.00	7
NS	8	8	7	n/a	7	8	5	10	7	6	7.33	10
PE	4	9	1	1	2	9	9	4	1	2	4.20	3
NF	9	10	9	n/a	4	10	7	8	5	1	7.00	9
One Year Progress Check												
Year		1998	1999	2000	1999	1999	2001	1997	1998	2000		
BC	**n/a**	**4**	**8**	**n/a**	**9**	**n/a**	**n/a**	**9**	**2**	**3**	**5.83**	**6**
AB	n/a	5	6	n/a	8	n/a	n/a	3	8	2	5.33	4
SK	n/a	7	3	n/a	7	n/a	n/a	4	7	10	6.33	10
MB	n/a	8	2	n/a	3	n/a	n/a	6	6	7	5.33	4
ON	n/a	3	7	n/a	4	n/a	n/a	2	5	4	4.17	1
QB	n/a	2	5	n/a	6	n/a	n/a	5	10	8	6.00	7
NB	n/a	9	4	n/a	2	n/a	n/a	8	9	5	6.17	9
NS	n/a	6	1	n/a	10	n/a	n/a	7	3	1	4.67	2
PE	n/a	10	10	n/a	5	n/a	n/a	1	4	6	6.00	7
NF	n/a	1	9	n/a	1	n/a	n/a	10	1	9	5.17	3
Period Progress Rank												
Period		1990 - 1998	1990 - 1999	1991 - 2000	1990 - 1999	1991 - 1999	2001	1990 - 1997	1990 - 1998	1991 - 2000		
BC	**n/a**	**1**	**7**	**n/a**	**2**	**1**	**n/a**	**4**	**3**	**5**	**3.29**	**2**
AB	n/a	5	2	n/a	7	8	n/a	7	6	1	5.14	4
SK	n/a	10	1	n/a	10	2	n/a	5	7	10	6.43	7
MB	n/a	9	5	n/a	5	7	n/a	8	5	9	6.86	9
ON	n/a	3	6	n/a	1	6	n/a	2	8	2	4.00	3
QB	n/a	2	4	n/a	3	3	n/a	3	4	3	3.14	1
NB	n/a	8	3	n/a	9	10	n/a	9	9	8	8.00	10
NS	n/a	6	10	n/a	6	4	n/a	6	1	4	5.29	5
PE	n/a	7	9	n/a	4	5	n/a	1	10	7	6.14	6
NF	n/a	4	8	n/a	8	9	n/a	10	2	6	6.71	8

Core Target 4 Environmental Quality — Environment, Health and Society

Environmental Quality
Rankings for Environmental Performance Indicators (BC, AB, ON, QB)



Source: BC Ministry of Water, Land, and Air Protection, 2001

Description

This core target has been developed in an attempt to provide a summary snapshot of BC's overall environmental quality. It is derived from four specific environmental performance indicators that follow in this report: air quality; greenhouse gas emissions per capita; wastewater treatment; and, protected areas. Interprovincial rankings are determined by averaging each province's rank in the last year for which data is available for each of the four indicators. The air quality indicator measures PM_{10} levels in the major metropolitan centre in each province (except Nova Scotia and Newfoundland and Labrador, where such urban data is not available).

Why it's Important

Environmental quality has both direct and indirect consequences for human health and quality of life.

Where BC Ranks (Best -> Worst)

By Province – **1st**
1-Year Progress Check – **n/a**
Period Progress Rank – **n/a**

How Does BC Compare?

Overall, BC ranked first in Canada in environmental quality, buoyed by a strong showing on the performance indicators for parks and protected areas and greenhouse gas emissions per capita.

Vancouver, BC's largest metropolitan centre, had the second best air quality among metropolitan centres included for interprovincial comparison.

Ontario and Manitoba ranked second and third respectively for environmental quality, registering solid results on wastewater treatment and protected areas. Alberta tied with Saskatchewan and Prince Edward Island for fourth spot, due to higher levels of greenhouse gas emissions per capita, though it ranked second on both protected areas and wastewater treatment. Quebec scored poorly on three out of four measures, resulting in an overall ranking of seventh on this aggregated "core target".

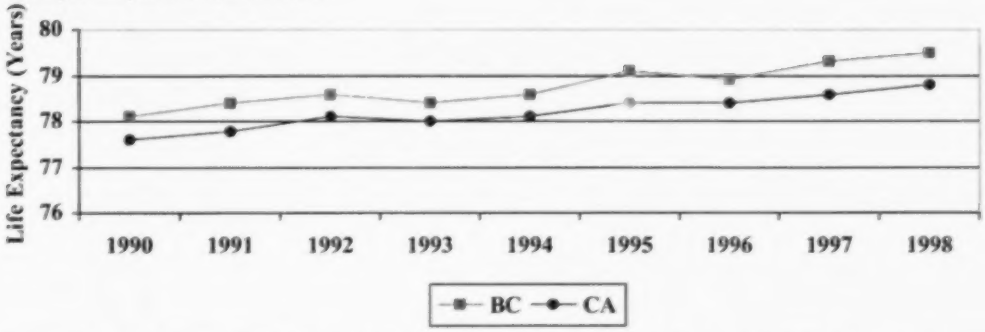
Rank by Province (last available year)

	Air Quality (2000)	GHG Per Capita (1999)	Wastewater Treatment (1999)	Protected Areas (2001)	Environmental Quality
BC	2	3	5	1	1
AB	7	10	2	2	4
SK	5	9	1	6	4
MB	4	6	3	4	3
ON	3	5	4	3	2
QB	6	1	7	8	7
NB	4	8	6	10	9
NS	n/a	7	8	5	8
PE	1	2	9	9	4
NF	n/a	4	10	7	9

Notes on Data: The Environmental Quality core target was developed from the four environmental performance indicators included in this report, as the Board was unable to identify a single measure that adequately encapsulates overall environmental quality. Should a more "scientifically robust" measure for overall environmental quality be available, the Board will revise this target measure. The Environmental Quality target was determined using an arithmetic average of the performance rankings of the four indicators (last available data year). For the Air Quality indicator, data is not available for the metropolitan areas of Halifax NS, and Saint John's, NF. The Environmental Quality rankings for Nova Scotia and Newfoundland were determined by the arithmetic average of rankings for Greenhouse Gas Emissions Per Capita, Wastewater Treatment, and Protected Areas only.

Core Target 5 Life Expectancy at Birth — Environment, Health and Society

BC versus Canadian Average
Life Expectancy at Birth, Both Sexes

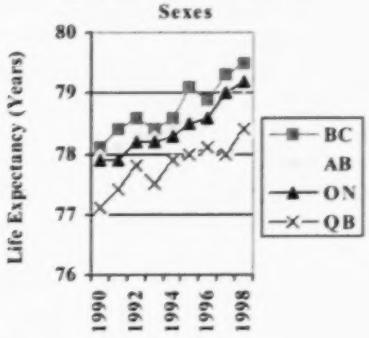


Source: 1990-1995, BC Stats; 1996-1998 Statistics Canada, The Daily - May 13, 1999 and May 23, 2001

Description

Life expectancy at birth is the average number of years that a child is expected to live in its lifetime, based on current mortality rates.

Provincial Comparison Life Expectancy at Birth, Both Sexes



Why it's Important

This is clearly a key indicator of the overall health of citizens in a jurisdiction.

Where BC Ranks (Best -> Worst)

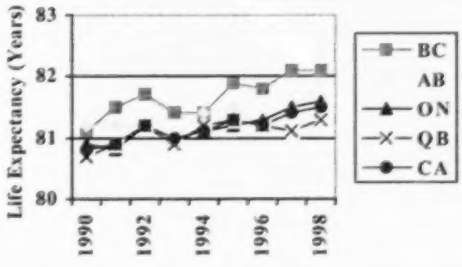
By Province (1998) – 1st
1-Year Progress Check (1998) – 4th
Period Progress Rank (1990 - 98) – 1st

How Does BC Compare?

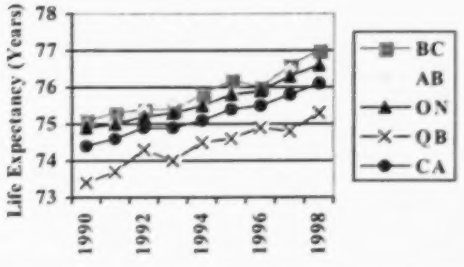
In 1998, British Columbia ranked first in Canada for life expectancy at birth for both males and females. Life expectancy at birth for both sexes reached 79.5 years in 1998, up from 78.1 years in 1990, the biggest increase in Canada. In 1998 the life expectancy of a male born in BC was 77.0 years, while the Canadian average was 76.1 years. BC led the nation in female life expectancy at birth in 1998 at 82.1 years, compared to the Canadian average of 81.5 years.

From 1990 to 1998, the gap between male and female life expectancy has narrowed by a sizeable margin. Changes in trend lines for "causes of death" and associated risk factors have been credited for this noticeable improvement.

Provincial and Canadian Average Comparison
Female Life Expectancy at Birth

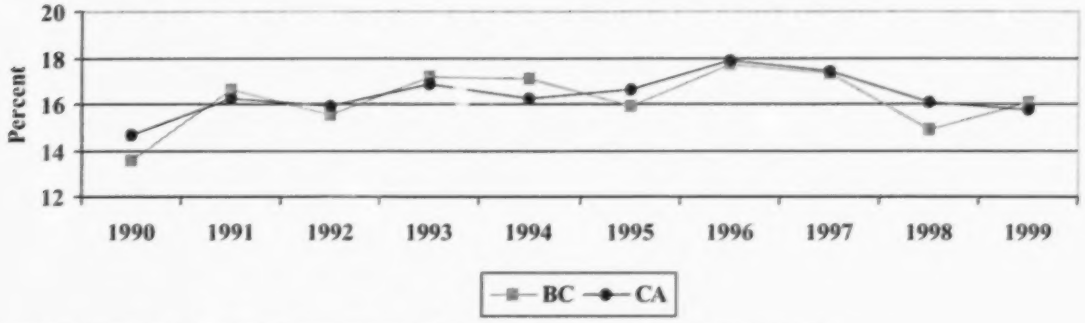


Provincial and Canadian Average Comparison
Male Life Expectancy at Birth



Core Target 6 Low Income Incidence — Environment, Health and Society

BC versus Canadian Average
Percent of Families and Unattached Individuals Below the After Tax Low Income Cut Off



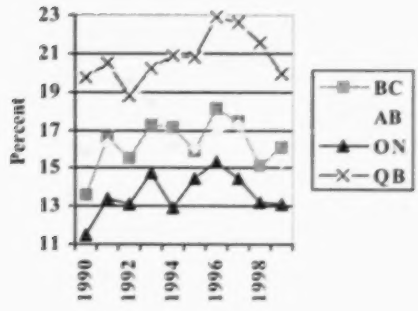
Source: BC Stats; Statistics Canada, Income Trends in Canada, 1980 - 1999, Cat No 13F0022XCB

Description

Canada, like most other countries, does not have an official definition of "poverty" or low income incidence. The best-known measure is Statistics Canada's Low Income Cut-Off. It measures the percentage of families and unattached individuals that lives below "unofficial" low income incidence lines, and is used in the absence of an official poverty measure.

The measure is the ratio of families and unattached individuals with low incomes (after tax) to the total population of families and unattached individuals. Statistics Canada has set Low Income Cut-offs to be the income level at which 54.7% or greater of after-tax income is spent on food, shelter and clothing.

Provincial Comparison
Percent of Families and Unattached Individuals Below the After Tax Low Income Cut Off



Why it's Important

There are a number of negative outcomes for families experiencing low incomes. People with low income may experience more physical and mental health problems, rely more on charity, attain lower levels of education, or have higher high school drop out rates.

Where BC Ranks (Best -> Worst)

By Province (1999) – **6th**
1-Year Progress Check (1998 - 1999) – **8th**
Period Progress Rank (1990 - 1999) – **7th**

How Does BC Compare?

In 1999, BC ranked sixth in Canada with 16.1% of the population below the low income cut-off level, slightly above the Canadian average of 15.8%. In comparison, Alberta ranked fifth with 15.3%, while Quebec posted the worst showing with 19.9% of the population below the low-income cut-offs.

BC experienced an 18.4% increase in the proportion of people with low-income based on this "unofficial" measure between 1990 and 1999, well above the Canadian average increase of 7.5%.

Note on Data: For further discussion of the LICO, please see additional Supplemental Information box on the next page.

Low Income Incidence (Stats Can Low Income Cut-Offs – LICO)

Low Income Cut-Offs have been criticized on many grounds as not providing a useful measure of poverty. Stats Canada sets the LICO to be the income level at which 54.7% or greater of after tax income is spent on food, shelter and clothing. The 54.7% line represents the average proportion of income spent on food, shelter and clothing (35% in 1992 over all households) plus 20 percentage points. Stats Canada periodically reviews the LICO level based on its Annual Survey of Family Expenditure. Due to the relative nature of the measure, there is the argument that poverty will never be eradicated as long as LICOS are used as a benchmark, since the poverty line will always be moving. For instance, it is possible for everyone in society to be better off, yet have no reduction in poverty, since relatively speaking, the people at the lower end of the spectrum will still be paying a larger portion of their income on the basics of food, clothing and shelter.

Another major criticism is that in calculating different LICOS for urban and rural areas, many basic expenditures are ignored. While the cost of housing is usually much less in rural areas than in urban areas, the costs of items such as transportation are far higher since they do not receive the same subsidies as are received in urban areas. Also, access to services such as health care and education is usually poorer in rural areas, and many retail items are more expensive in rural areas due to less competition. This means that, with the exception of housing, people in rural areas often have to pay more to get the same standard of living as those residing in urban areas. While it may still be less expensive overall to live in rural areas when housing is taken into account, it is unlikely that the differences are as large as those reflected in the LICOS.

While there are problems with LICOS, there are also difficulties with other measures of poverty. Many argue that poverty lines should be based on the cost of a basic basket of goods, but then the question arises of what to include in that basket. Is entertainment considered a basic need? Should anyone who can properly feed, clothe and house themselves not be considered poor, even if they have no income remaining for anything else, such as entertainment, basic transportation, telecommunication, and so on? If one asks different people these questions, one will likely get different responses.

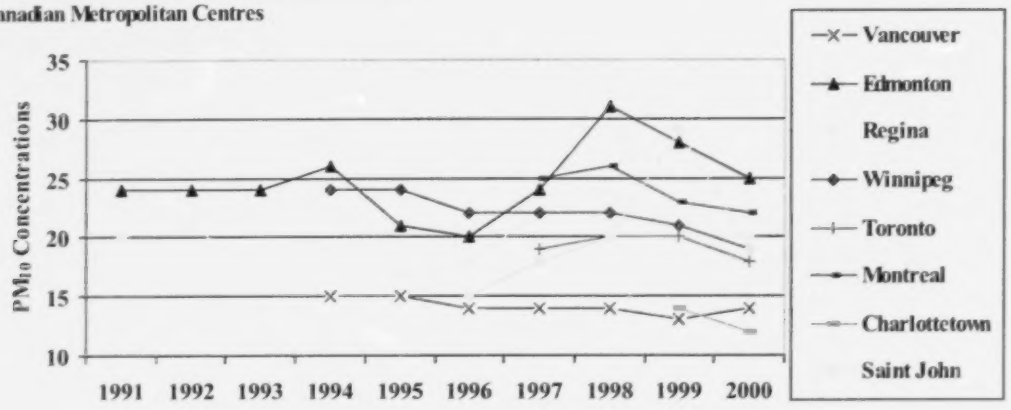
It becomes clear as one tries to define poverty that any definition will be subjective and subject to disagreement. With this in mind, Statistics Canada's LICOS may be as good a measure as any- despite Statistics Canada's objections that they are not intended to be used as poverty lines. (This begs the question that if those people living in "straitened circumstances" are not to be considered poor, then what is the purpose of determining Low Income Cut-Offs in the first place?)

There is currently an initiative underway in Canada, sponsored by the provincial and territorial Ministries of Social Services and Human Resources Development Canada, to devise a needs-based measure of poverty called the Market Based Measure (MBM). The Progress Board will monitor developments and include updates in future reports.

Source: BC Stats.

Performance Indicator 14 Air Quality Environment, Health and Society

Average Annual Concentration of PM_{10} in major Canadian Metropolitan Centres



Source: BC Ministry of Water, Land, and Air Protection, 2001, Air Resources Branch

Description

Air quality is measured by the amount of fine particulates in the air. Fine particulates include dust, dirt, liquid droplets and smoke. Most air quality monitors measure fine particulates under 10 microns (PM_{10}), but recent findings have shown that particles 2.5 microns or less ($PM_{2.5}$), pose the greatest health risk. Direct costs to health care resulting from poor air quality may be significant.

Factories, cars, power plants, construction activity, and numerous other man-made sources emit fine particulates. The indicator is measured by individual cities, rather than by province.

Why it's Important

Air quality has direct effects on human health. Fine particulates may affect breathing, aggravate respiratory and cardiovascular disease, alter the body's defense systems and damage lung tissue. Both premature mortality and emergency hospital visits may increase during high concentrations of fine particulates.

Where BC Ranks (Best -> Worst)

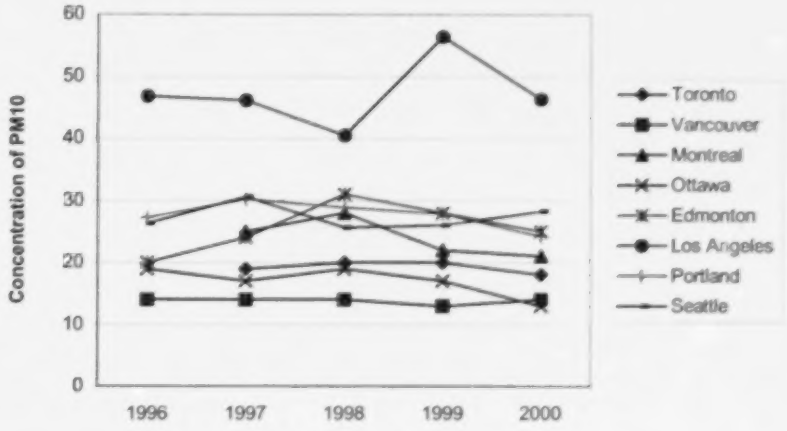
By Major Metro Centre (2000) – **2nd**
1-Year Progress Check (2000) - **n/a**
Period Progress Rank - **n/a**

How Does BC Compare?

Nationally, few communities are monitored for $PM_{2.5}$, but based on measures of fine particulates PM_{10}, BC communities have significantly better air quality than many communities across Canada. Some BC interior communities have significantly worse air quality than communities across the country. Vancouver has low PM_{10} levels compared to other major metropolitan centers.

Note on Data: Monitoring for PM_{10} is relatively new in Canada and most continuous monitoring stations do not have more than 5 or 6 years of data. PM_{10} concentrations can vary with weather as well as levels of emissions. Therefore, a longer time series than is currently available is required to calculate robust statistical trends. Nationwide air quality data is available for many communities, not just major metropolitan areas. To keep comparison manageable, the Progress Board has included the major metropolitan area in each province for which data is available. Data is not available for Halifax, NS, and St. John's, NF.

Air Quality



Source: The Centre for Spatial Economics; Environmental Protection Agency Air Data Database

Description

Air quality is measured by the number of particles under 10 microns per cubic metre of air. Particles this small can settle in the lungs and result in respiratory problems, lung disease and ultimately death. High pollution counts can make breathing difficult for individuals of all ages, particularly the elderly and those with prevailing cardio-vascular problems. These particles are a result of human activity and come from smoke, dust and the combustion of fossil fuels.

Where BC Ranks

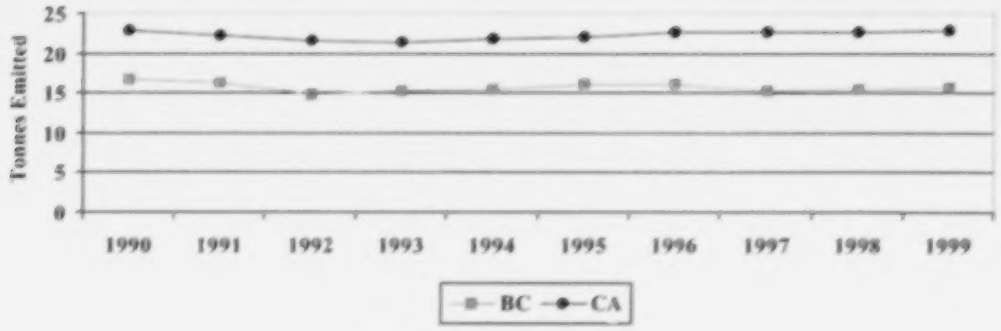
By Major Metro Centre (2000) – 2nd
1-Year Progress Check – N/A
Period Progress Rank – N/A

How does BC Compare?

Air quality in a particular city is a function of the overall activity occurring in the city. Los Angeles has the poorest air quality of the metropolitan centres examined. Vancouver's air quality remained steady from 1996 to 2000. Toronto, Edmonton, Portland and Ottawa showed declines in PM10 concentrations over the period. In 2000, Ottawa had slightly better air quality than Vancouver.

Performance Indicator 15 Greenhouse Gas Emissions Environment, Health and Society

BC versus Canadian Average
Greenhouse Gas Emissions per Capita

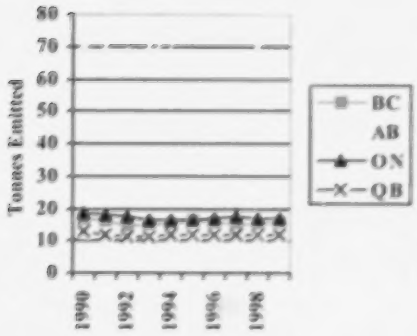


Source: Ministry of Water, Land and Air Protection, 2001, Air Resources Branch; Environment Canada 2000

Description

Energy prices, industrial structure, consumption patterns and weather are major influences on greenhouse gas (GHG) emissions. This indicator measures how many tonnes of greenhouse gases are emitted per person. Greenhouse gases include carbon dioxide, ozone, methane and nitrous oxide.

Provincial Comparison
Greenhouse Gas Emissions per Capita



Why it's Important

Human activities are increasing concentrations of greenhouse gases in the earth's atmosphere, and more likely than not, are contributing to climate change.

Where BC Ranks (Best -> Worst)

By Province (1999) – 3rd
1-Year Progress Check (1999) – 9th
Period Progress Rank (1990 - 1999) – 2nd

How Does BC Compare?

In 1999, BC's per capita GHG emissions levels were third lowest in Canada at 15.8 tonnes, a 6.3% decrease from 1990, when emissions were 16.8 tonnes per capita. Quebec had the lowest per capita GHG emissions at 12 tonnes, while Alberta had the highest at 72.3 tonnes per capita. In comparison, the Canadian average was 22.8 tonnes per capita.

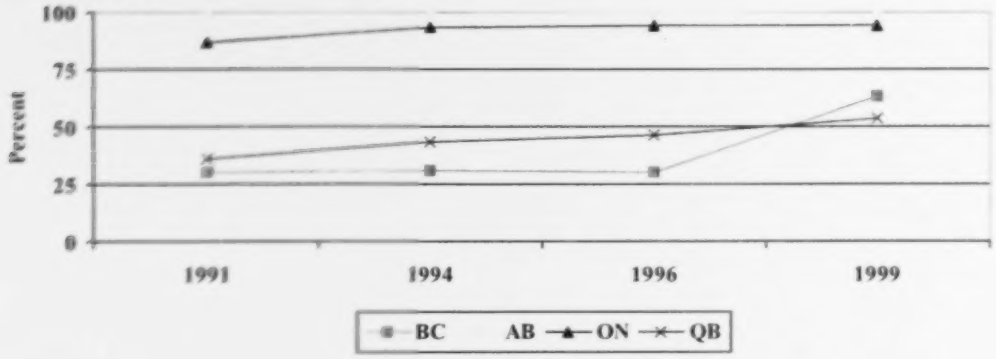
While BC's per capita GHG emissions have declined since 1990, total emissions have increased by over 20%.

BC's reliance on "clean" hydroelectric power generation contributes to its favourable ranking relative to most other provinces. Approximately 40% of Alberta's GHG emissions are from the petro-chemical industry, with coal-based electricity generation also contributing significantly to its emissions.

Transportation accounts for 42% of total GHG emissions, the largest single source in BC.

Performance Indicator 16 Wastewater Treatment Environment, Health and Society

Percent of Population Served by Secondary or Tertiary Wastewater Treatment



Source: Ministry of Water, Land and Air Protection; Environment Canada, MUD Database, 2001

Description

This indicator measures the percentage of population served by sewers that have wastewater treatment facilities in Canada.

Wastewater may be treated in different steps: preliminary/primary treatment that filters solid material, secondary treatment removes greater suspended material, and tertiary treatment aims to remove substances such as contaminants.

Why it's Important

The purpose of wastewater treatment is to protect human health and to reduce stress on the receiving environment.

Wastewater consists of human waste and harmful substances such as motor oil, pesticide residue, paint thinner, pharmaceuticals and solvents that threaten human health and ecological balance.

Municipal wastewater is one of the largest sources of pollution in Canadian waters. Wastewater contributes to ecological and human health impacts including algae blooms, fish kills, beach and shellfish area enclosures.

Substances present in sewage effluent are capable of affecting the endocrine systems of biological organisms. This may result in adverse health effects, possibly including reproductive and immune system dysfunction and neurological disorders (among other things).

Where BC Ranks (Best -> Worst)

By Province (1999) - **5th**
1-Year Progress Check (1999) - **n/a**
Period Progress Rank (1991- 1999) - **1st**

How Does BC Compare?

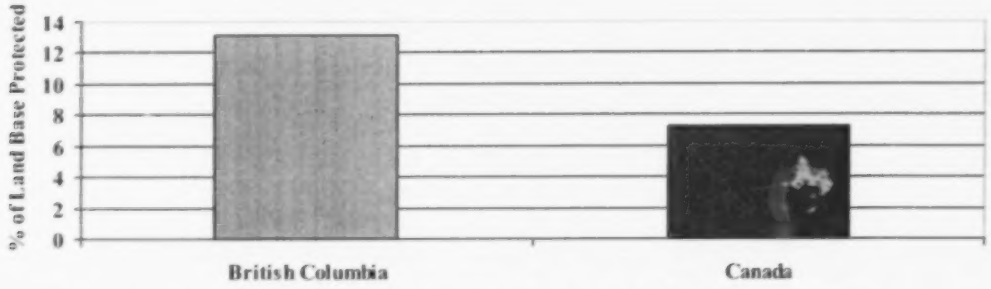
In 1991, 30% of BC's population served by sewers had wastewater treatment facilities. By 1999, that figure had increased to 63% due to an upgrade of a Lower Mainland wastewater treatment plant from primary to secondary treatment. In comparison, over 90% of the population served by sewers in Alberta, Saskatchewan, Manitoba and Ontario had secondary or tertiary wastewater treatment processes.

Generally, provinces discharging sewage into inland waters have a higher percentage of the population served by secondary or tertiary treatment.

Note on Data: Secondary treatment includes waste stabilization ponds. Data refers to the proportion of the population served by a municipal wastewater treatment system. In Canada, nearly 75% of the population (22.5 million) are served by municipal sewer systems. Population served by on-site systems are excluded. Approximately 17% of British Columbians are served by on-site systems under the Ministry of Health which are excluded from this analysis.

Performance Indicator 17 Protected Areas Environment, Health and Society

BC versus Canadian Average
% of Land Base Protected
(2001)

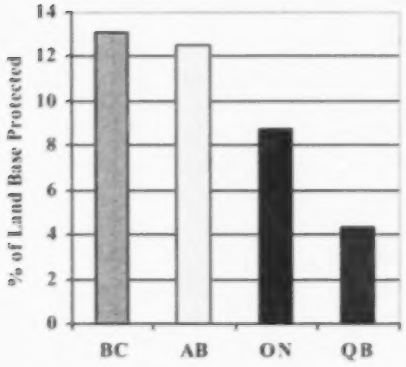


Source: BC Ministry of Water, Land and Air Protection; Ministry of Sustainable Resource Management, 2001.

Description

This indicator measures the overall percentage of a jurisdiction's land base that is included within parks or protected areas. In British Columbia, protected areas consist of national parks, ecological reserves, class A and C parks, recreation areas and protected areas under the *Environment and Land Use Act*.

Provincial Comparison
% of Land Base Protected (2001)



Why it's Important

Areas classified as protected are shielded from resource extraction or human activity that results in long term or large-scale impacts on the land's natural character. Such areas are also maintained as a "stock" of the land-base for heritage, aesthetic, biodiversity and other preservation values.

Where BC Ranks (Best -> Worst)

By Province (2001) – **1st**
1-Year Progress Check (2001) - **n/a**
Period Progress Rank - **n/a**

How Does BC Compare?

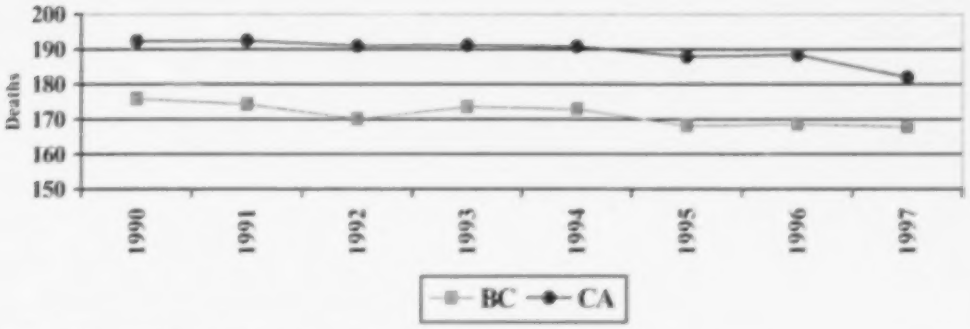
In 2001, BC ranked first in Canada for the percentage of the land base set aside in protected areas, at 13.1%. Alberta ranks second with 12.5% of its land base protected. New Brunswick ranks tenth among the provinces at 3.17%. As of April 2001, there are 12.3 million hectares protected in BC.

By 2001, 7.3% of Canada's land base was protected, an increase of about 3% since 1989.

Note on Data:
Ontario and Quebec figures reflect July 2000 data, and may be slightly underestimated. Other provinces are current as of September 2001. Protected areas are classified under IUCN (World Conservation Union) classification I, II, III – which does not allow resource extraction.

Performance Indicator 18 Cancer Mortality Environment, Health and Society

BC versus Canadian Average
Cancer Mortality Rate Per 100,000 Population



Source: Statistics Canada, Health Statistics at a Glance, Cat No 82F0075XCB

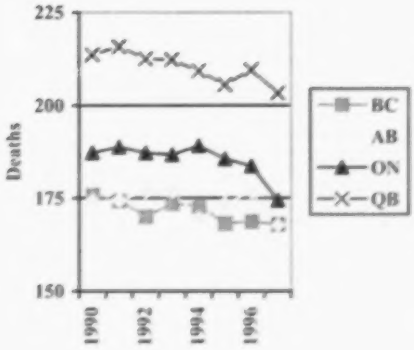
Description

Cancer is a disease in which abnormal cells form in human organs or tissue and grow to form a tumour. Two-thirds of all cancers are caused by a person's lifestyle, such as diet, physical activity, drinking and smoking habits. This indicator is evidence of a jurisdiction's success in persuading people to make healthy lifestyle choices

Why it's Important

Cancer is one of the leading causes of death in Canada. Some estimates suggest that there will be as many as 65,300 cancer deaths in 2001.

Provincial Comparison
Cancer Mortality Rates Per 100,000 Population



Approximately 40% of men and 35% of women will develop cancer. Fully 25% of men and 20% of women will die of cancer. Tobacco use is the leading cause of cancer deaths (30%) and is responsible for approximately 85% of lung cancer cases. Skin cancer is the most commonly diagnosed cancer in Canada with approximately 60,000 cases diagnosed every year.[4]

Where BC Ranks (Best -> Worst)

By Province (1997) – **3rd**
1-Year Progress Check (1997) – **9th**
Period Progress Rank (1990 - 97) – **4th**

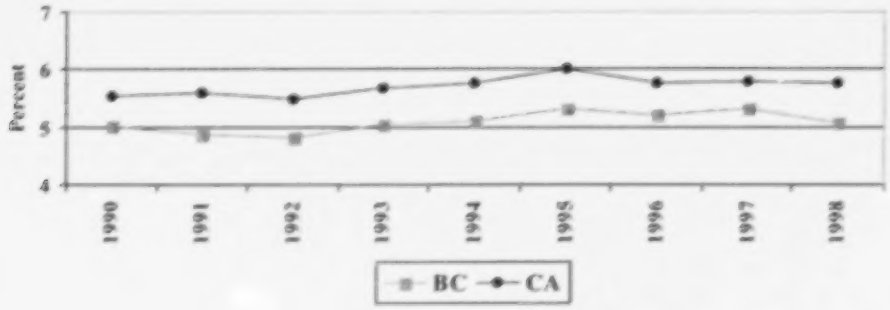
How Does BC Compare?

In 1997, approximately 168 people per 100,000 died from cancer in BC. This was the third lowest rate in Canada, below the Canadian average of 182 people per 100,000. BC saw a drop from its 1990 mortality rate of 176 people, the fourth largest decline in Canada. The Canadian average declined by approximately 10 deaths per 100,000 population since 1990. The most commonly diagnosed cancer continues to be prostrate cancer for men and breast cancer for women. Lung cancer remains the leading cause of cancer death in both men and women.

[4] Source: *Cancer*. Health Canada. 2001. http://www.hc-sc.gc.ca/english/diseases/cancer.html

Performance Indicator 19 Low Birth Weight Environment, Health and Society

BC versus Canadian Average Low Weight Births as a % of Total Live Births

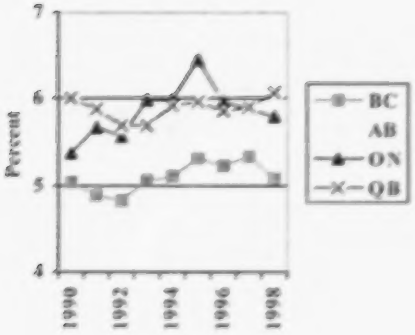


Source: BC Stats; Statistics Canada, Health Statistics at a Glance, Cat No 82F0075XCB and Births, Shelf Tables 1998, Cat No 84F0210XPB

Description

Newborns weighing less than 2,500 grams are considered to be low birth weight infants. The indicator is the number of live births where birth weight was less than 2,500 grams expressed as a percentage of the total newborn population. Factors that contribute to low birth weight are socio-economic status, social support, stress and personal habits. This indicator serves as a "proxy" for a jurisdiction's overall social condition.

Provincial Comparison Low Weight Births as a % of Total Live Births



Why it's Important

Low birth weight newborns have a substantially higher rate of post birth illness and death. In addition, long-term health problems, lower IQ and academic achievement, increased hospitalization rates, and disabilities are associated with low birth weight.

Where BC Ranks (Best -> Worst)

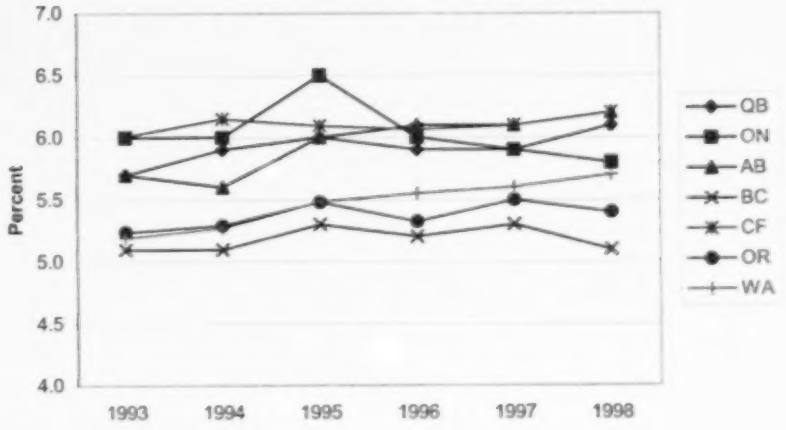
By Province (1998) – 2nd
1-Year Progress Check (1998) – 2nd
Period Progress Rank (1990 - 98) – 3rd

How Does BC Compare?

In 1998, British Columbia ranked second in Canada with 5.1% of all live births weighing less than 2,500 grams. This compares favourably with the Canadian average of 5.8%. From 1990 to 1998, BC's rate for low birth weight babies increased by 0.7%, the third smallest increase in the country. Nationally, there was a 4% increase over the 1990 base year.

BC's comparatively small increase in the proportion of low birth weight newborns over its 1990 base, coupled with a comparatively larger increase nationally, moved BC from a fourth place rank in 1990 to second overall in 1998.

Low Birth Weight



Source: The Centre for Spatial Economics

Description:

Newborns weighing less than 2,500 grams (5.5 pounds) are classified as low birth weight infants. The factors that might contribute to a low birth weight baby include socio-economic status, social support, stress and personal habits. Low birth weight babies are prone to higher rates of illness and have a higher probability of hospitalization, future health problems and disabilities. This indicator serves as a benchmark for the overall social condition of a province or state. The fewer babies born with a low birth weight, the lower the potential financial burden on the health care system.

Where BC Ranks:

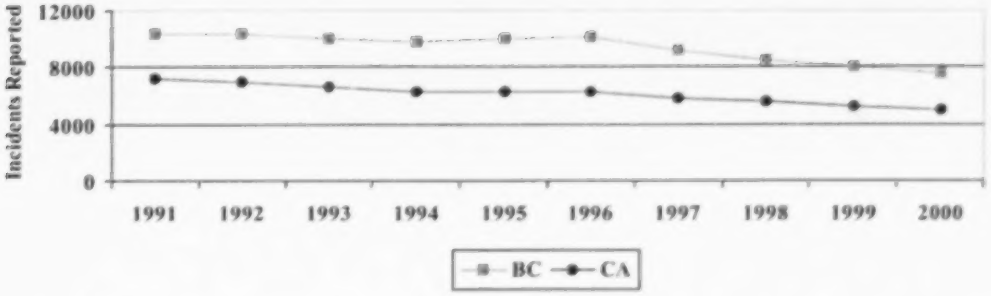
By Jurisdiction (1998) – 1
1-Year Progress Check (1997-1998) – 1
Period Progress Rank (1993-1998) – 2

How Does BC Compare?

BC fares very well in all three ranking categories. In 1998, Alberta and California posted the highest "low birth weight rates" of 6.2% each. BC has consistently had the lowest rate every year from 1993 to 1998.

Performance Indicator 20 Personal and Property Crime Environment, Health and Society

BC versus Canadian Average
Personal and Property Crime Rates
per 100,000 Population



Source: BC Stats; Statistics Canada, and Canadian Crime Statistics, Cat No 85-205 and Juristat, Cat No 85-002-XPB

Description

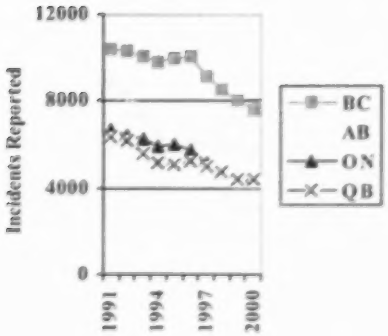
Personal crime includes those offenses in the Criminal Code known to police that deal with the application or threat of application of force to a person, including homicide, attempted murder, assault, sexual assault, robbery and abduction. Traffic incidents resulting in death or bodily harm are excluded.

Property crime includes incidents known to police involving unlawful acts with the intent of gaining property but don't involve the threat or use of violence, (e.g. theft, breaking and entering, fraud and possession of stolen goods).

Why it's Important

Crime rates may be an indicator of other social and economic problems. They can reflect lack of employment opportunities, inadequate education or social dysfunction. Crime is very costly to society, both from individual and community perspectives.

Provincial Comparison
Personal and Property Crime Rates



Where BC Ranks (Best -> Worst)

By Province (2000) – **10th**
1-Year Progress Check (2000) – **3rd**
Period Progress Rank (1991 - 00) – **5th**

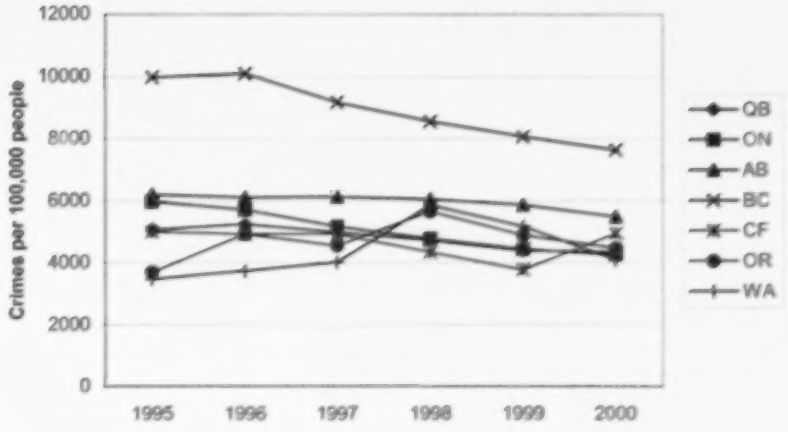
How Does BC Compare?

In 1991, British Columbia had the highest reported crime rate in Canada with 10,414 crimes committed per 100,000 population. In 2000, BC reported 7,619 crimes per 100,000 population, an overall decrease of 26.8% since 1991.

From 1991 to 2000, BC experienced an annual average decrease of 3.35%, the fifth strongest decrease in Canada. In comparison, Alberta's rate decreased annually by 5.12% on average, while Canada posted an annual average decline of 3.87%. Despite better decreases than in most of Canada, BC experiences more incidents of reported crime than any of the other provinces. In BC, there is a large discrepancy between personal and property crime. In 2000, BC had the third highest incidence of personal crime, but the highest rate of property crime in Canada by a wide margin.

Traditionally, crime rates in Canada tend to increase from east to west. Crime rates in the Atlantic provinces are lower than Ontario and Quebec, which in turn are lower than the western provinces.

Personal and Property Crime Rates



Source: The Centre for Spatial Economics; Federal Bureau of Investigation and the Statistical Abstract of the United States

Description:

The personal (violent) and property crime rate is based on the number of reported crimes per 100,000 people. Personal (violent) crime includes all degrees of murder, rape, robbery and assault. Property crime includes burglary, theft and arson. A lower crime rate indicates a higher perceived sense of security.

A crime rate that is higher relative to another jurisdiction sends a signal that one is at a higher probability of being the victim of a crime. Also, a higher crime rate results in a perceived declined in social control.

Where BC Ranks:

By Jurisdiction (2000) – 7
1-Year Progress Check (1999-2000) – 4
Period Progress Rank (1995-2000) – 2

How Does BC Compare?

The crime rate per 100,000 people in BC is the highest of all provinces and states over the 1995-2000 period. Even though this was still the case in 2000, the crime rate has been dropping since the mid 1990s. Based on available data, BC's crime rate peaked in 1991 at over 10,400 crimes per 100,000 people, the highest of any province in Canada.

All four provinces have seen their crime rate decline since 1995. In 2000, Ontario had the lowest crime rate of 4,265 crimes per 100,000 people. On the other hand, BC had the highest crime rate in 2000 with 7,619 crimes per 100,000 people. Although difficult to see from the graph, crime rates for California, Washington and Oregon have increased over the 1995-2000 period.

This page left blank intentionally.

V. Comparison of The Lower Mainland and Regional British Columbia

Overview

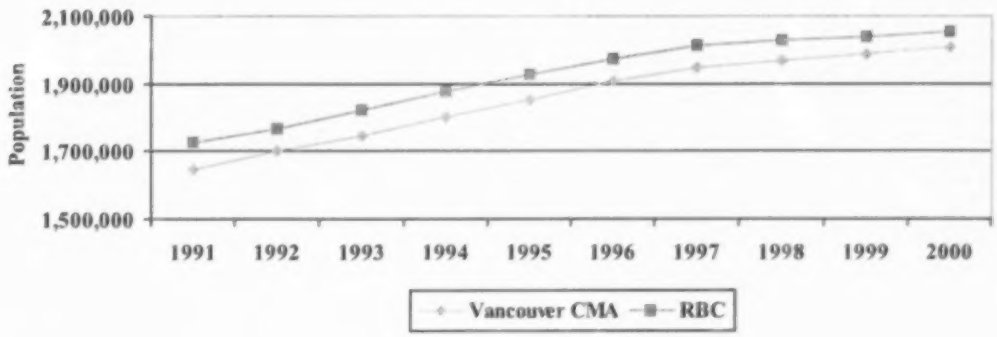
So far the focus of the benchmarking analysis in this report has been on comparing British Columbia to other provinces (and, in some cases, states). While this is an important exercise, it overlooks the fact that BC is comprised of a set of regional economies that differ significantly in their industrial structures and demographic characteristics and trends. By definition, regional differences are not apparent in aggregated provincial data.

There are reasons why BC's regions are not included as part of the "core" benchmarking exercise. Most importantly, many types of data for the provinces often are not available for regions within provinces. To establish and implement a system of regional benchmarking would take significantly longer than the time available for completion of this report.

Nevertheless, to provide some initial information on regional differences, measures for the Vancouver Census Metropolitan Area (see **Figure 1 - Map of Vancouver Census Metropolitan Area** on page 68) and Regional BC are presented. This approach serves to highlight variations between what might be called "large urban British Columbia" and "Regional BC", although the latter is of course made up of a number of different regions. The measures reported in this chapter in some cases match those used for the province as a whole. In other cases, they simply illustrate trends in what amount to proximate "performance indicators."

It should be noted that the populations of the Vancouver CMA and the Regional BC are very closely matched (roughly 2 million in each case), and both areas also experienced similar population growth during the 1990s, as shown in the chart below. As a result, some of the measures that focus on levels of activity can also be treated as approximations of per capita values – although some caution is required here since the population of Regional BC overall is slightly higher than that of the Vancouver CMA.

Total Population
Vancouver CMA versus Regional BC



The data show that tax-filers' employment income is higher in the Vancouver CMA, while retail sales per capita are also slightly higher. The gap between the two areas in employment income widened over the 1990s. The data on housing starts are consistent with this picture, in that even though population growth in the two areas has been similar over the period, housing starts have been higher in Vancouver CMA.

Looking at our core jobs target, the employment-population ratio, a higher proportion of the working-age population in the Vancouver region is working relative to the Regional BC – a finding that helps to explain higher employment incomes in the lower mainland.

The performance indicators for education point to a higher level of education in greater Vancouver than Regional BC. This result, combined with the higher proportion of the Vancouver CMA labour force employed in occupations related to the natural and applied sciences, contributes to the pattern of higher employment incomes in the lower mainland region. It is likely that stronger rates of new business formation in the greater Vancouver region also help to lift incomes above those in other parts of the province.

The indicators on the environment show a mixed result. Vancouver falls in the middle on the main air quality indicator used in the report, but recently has outperformed Regional BC in wastewater management. The health indicators reveal that while people in the Vancouver CMA generally outlive those elsewhere in the province, the incidence of low weight births is higher in Vancouver. Finally, Regional BC enjoys lower rates of personal and property crime and has a smaller proportion of residents living in low-income circumstances than the Vancouver area.

Figure 1 - Map of Vancouver Census Metropolitan Area

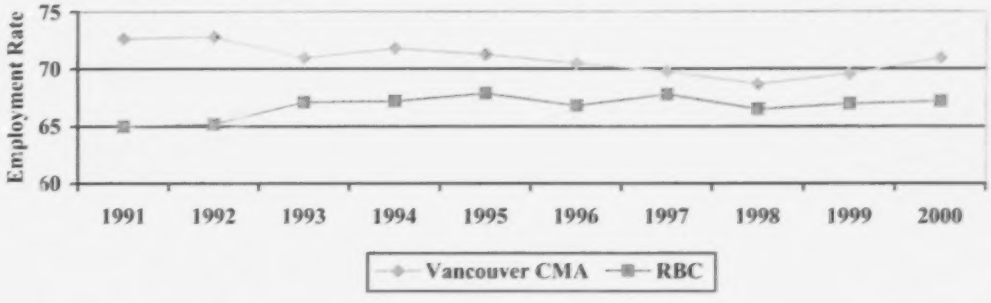
Economy, Innovation and Education

Regional Performance Indicators

1. Jobs: Employment Rate
2. Tax Filer's Employment Income
3. Manufacturing Shipments
4. Retail Sales
5. Housing Starts - Dwelling Units
6. Non-Residential Building Permits
7. Secondary School Graduates
8. University Completion
9. Scientists and Engineers Employed
10. New Business Formations

Jobs: Employment Rate

Employment to Population Ratio, Age 15 to 64
Vancouver CMA versus Regional BC



Source: BC Stats, Statistics Canada, Labour Force Survey

Description
This indicator shows the employment to population ratio, age 15 to 64, in British Columbia between 1991 and 2000.

Why it's Important
The employment rate is a measure of the ability of a jurisdiction and the desire of the population to participate in the workforce. Higher labour force participation generally occurs in areas of strong economic activity.

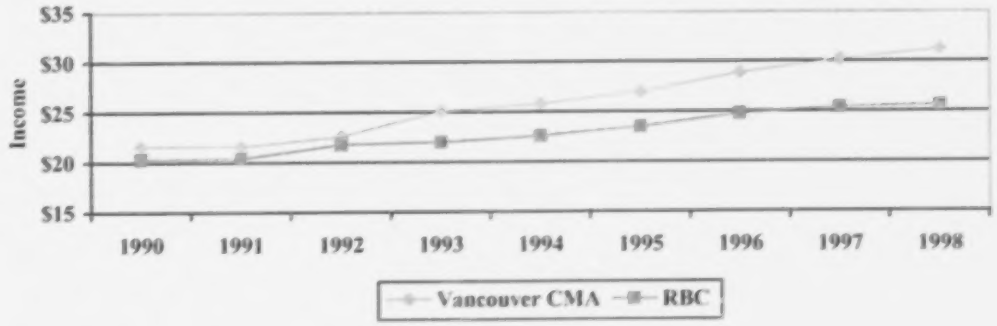
Analysis
Vancouver CMA saw a small decline in the employment to population ratio from 1991 to 2000. In 1991, Vancouver CMA's employment to population ratio was 72.7%, falling to 71.0% by 2000.

In Regional BC, 65.0% of the population, age 15 to 64, was employed in 1991. By 2000, the figure had increased slightly to 67.2%. Both areas of the province saw fluctuations throughout the period.

The majority of Vancouver CMA employment comes from manufacturing, trade and service industries. The farther from Vancouver, the more prominent the role forestry and agriculture play in the total employment to population ratio.

Tax Filer's Employment Income

Taxfiler's Employment Income
Vancouver CMA versus Regional BC
(in $ billions)



Source: BC Stats; Canada Customs and Revenue Agency

Description
This indicator measures the income earned by British Columbians from employment and self-employment as reported on tax returns to the Canadian Customs and Revenue Agency. For tax purposes, employment/self-employment includes wages, salaries, taxable allowances, benefits, commissions, tips and gratuities as well as net income from fishing and farming operations, net professional and unincorporated business income and net commission income from 1990 to 1998.

Why it's Important
This indicator is seen as a measure of economic activity and individual prosperity.

Analysis
Vancouver CMA saw strong growth in employment income in the decade, while Regional BC posted less growth.

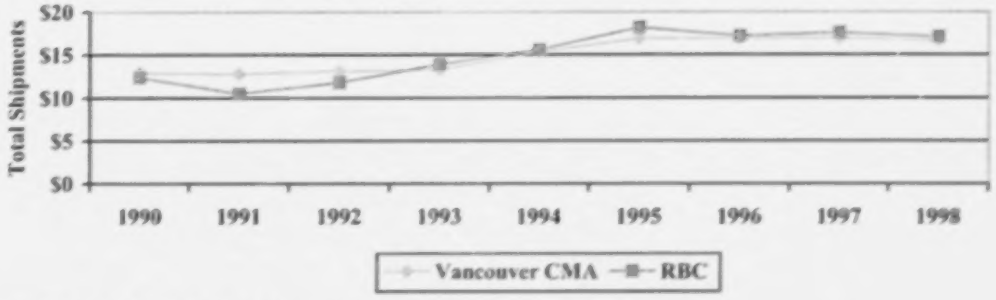
In 1990, Vancouver CMA's employment income was $21.5 billion. In 1998, income had grown to $31.2 billion, an increase of 45%.

Regional BC saw far lower growth. In 1990, employment income was $20.3 billion and increased 26.1% to $25.6 billion by 1998.

The large difference in growth has resulted in Vancouver CMA increasing its share of BC's total employment income from 51.6% in 1990 to 55% in 1998.

Manufacturing Shipments

Manufacturing Shipments
Vancouver CMA versus Regional BC
(in $ billions)



Source: BC Stats; Statistics Canada

Description

This indicator is a measure for overall manufacturing activity in billions of dollars in BC from 1990 to 1998.

Why it's Important

As a measure of overall manufacturing activity, this indicator plays a vital role in determining an area's overall economic activity.

Analysis

British Columbia's manufacturing shipments ebbed and flowed from 1990 to 1998 particularly in Regional BC.

Vancouver CMA experienced steady growth throughout the 1990s. In 1990, total manufacturing shipments were $12.9 billion. By 1998, shipments totaled $16.7 billion, an increase of 29.4%.

Regional BC saw stronger growth. In 1990, manufacturing shipments were $12.4 billion, and by 1998, totaled $17.2 billion, an increase of 38.4%. Shipments peaked in 1995 at $18.2 billion but experienced a sharp decrease the next year, followed by stagnant growth until 1998. Three major manufacturing activities comprise the majority of BC's manufacturing sectors: food, wood and metal fabricating.

Both food and wood manufacturing shipments fluctuated from 1995 to 1999, with food shipments posting a $114 million decline. Metal manufacturing shipments showed a strong increase from $1.6 billion to $1.95 billion in the same period.[1]

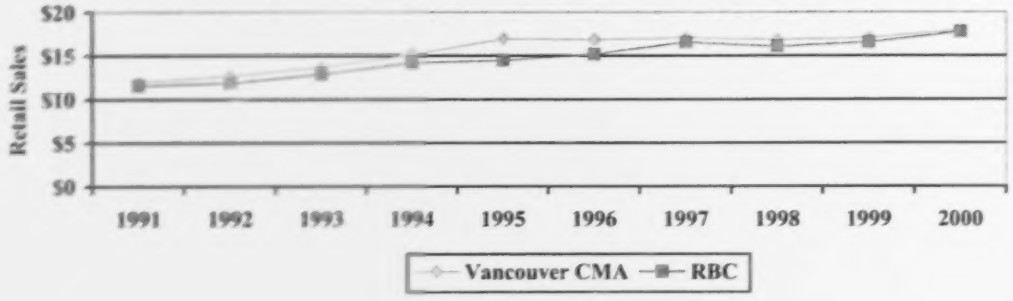
The manufacturing sector (including natural resource-based products) contributed over $9 billion to BC's real GDP in 1999.[2]

---

[1] Source: *Quarterly Regional Statistics - Second Quarter 2001*. BC Stats. September 2001.
[2] Source: *Provincial Gross Domestic Product by Industry, 1984-1999*. Statistics Canada.

Retail Sales

Retail Sales
Vancouver CMA versus Regional BC
(in $ billions)



Source: BC Stats, Statistics Canada

Description
This indicator measures sales at retail outlets. Excluded are direct sales which bypass the retail store such as vending machines, door-to-door printed materials sold by a publisher directly as well as sales taxes and non-operating revenue.

Why it's Important
Retail sales constitute a significant proportion of GDP and are used as a measure of economic performance.

Retail trade is one of BC's largest sources of employment. In 1999, 255,200 people were employed in BC's retail trade.[3]

Analysis
British Columbia experienced steady growth in retail sales during the 1990s, although most growth occurred before the mid 1990s.

Vancouver CMA in 1991 posted retail sales of $11.97 billion. In 2000, retail sales grew to $18.04 billion, an overall increase of 50.7%. The majority of growth occurred up to 1995 when sales reached $17 billion, an increase of 41.7% over 1991 figures. From 1995 to 2000, retail sales increased by $1.06 billion, or 6.3%.

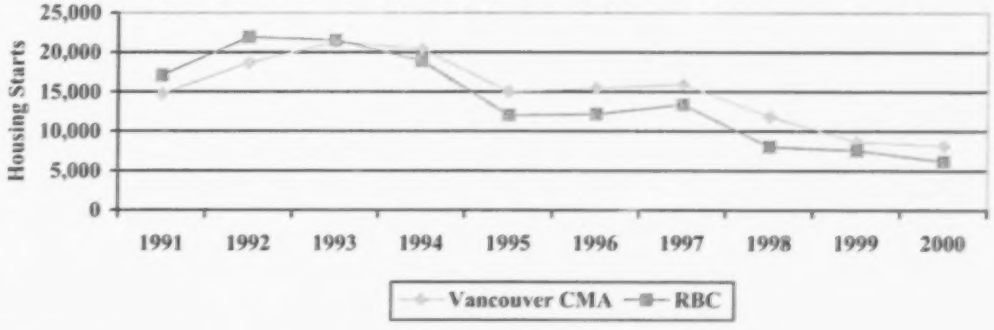
Regional BC saw similar growth. In 1991, retail sales totaled $11.6 billion, and by 2000, sales totaled $17.8 billion, an increase of 52.7%.

For both areas of BC, growth slowed in the latter part of the 1990s, but there was a sizeable "uptick" in retail sales during 2000.

[3] Source: *A Guide to the BC Economy and Labour Market*. BC Stats. April 2001.

Housing Starts - Dwelling Units

Housing Starts - Dwelling Units
Vancouver CMA versus Regional BC



Source: BC Stats: CMHC

Description

This indicator measures the number of dwelling units started and the number of permits issued for construction. It represents the count of dwelling units in new structures designated for non-transient year-round occupancy. The start is recorded when a footing is installed. All new units are counted for urban areas of 10,000 or greater population. Smaller areas are sampled and an estimate is included in reported information.

Why it's Important

Housing starts are considered a good leading indicator for home sales and a major indicator of economic activity and consumer confidence. Housing starts are an important generator of employment. Some estimates suggest that each housing start creates 2.8 person-years of employment.[4]

Analysis

British Columbia has seen a large decrease in the number of housing starts since the early 1990s.

In 1991, Vancouver CMA posted 14,769 housing starts. By 2000, housing starts had fallen 44.5% to 8,203. Housing starts peaked in 1993 at 21,307.

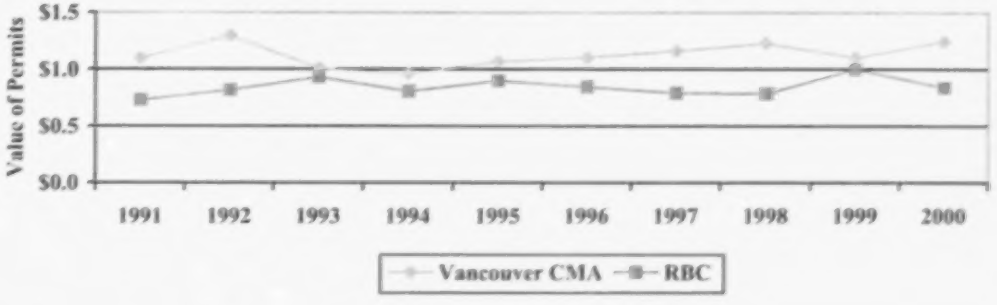
Regional BC followed a similar trend. In 1991 housing starts totaled 17,106, but by 2000 the numbers had fallen to 6,215, a decrease of 63.7%. In 1992, housing starts peaked at 21,937.

In 2000, BC's housing starts were at an all-time low. Poor economic performance and decreasing in-migration, coupled with a net outflow of people to other provinces were key contributors to subdued housing starts in the late 1990s.[5]

[4] Source: CMHC, The Current Performance of the Housing Industry in Canada. 1999
[5] Source: BC Stats, Migration Highlights. Third Quarter 1998

Non-Residential Building Permits

Non-Residential Building Permits
Vancouver CMA versus Regional BC
(in $ billions)



Source: BC Stats; Statistics Canada

Description
This indicator measures the value of permits for non-residential buildings from 1991 to 2000 issued by municipalities and regional districts. It includes industrial, commercial and institutional construction, as well as new government buildings. Also included are alterations, renovations and additions to non-residential buildings.

Why it's Important
The total number of non-residential building permits issued is an important measure of a jurisdiction's economic activity and attractiveness to investors.

Analysis
British Columbia experienced growth, despite fluctuations, in the number of non-residential business permits from 1991 to 2000.

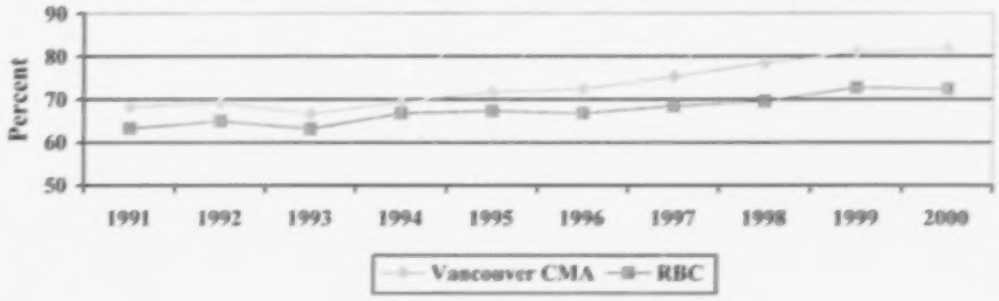
In 1991, Vancouver CMA posted $1.1 billion in building permits. By 2000, building permits totaled $1.3 billion, an increase of 18.2%. Regional BC saw an increase from $733 million in building permits in 1991 to $841 million in 2000, an increase of 14.7%. Both areas saw large fluctuations from year to year for building permits. This was more pronounced in Regional BC than in Vancouver CMA, which posted more stable performance.

All types of building permits increased from 1994 to 2000, but with large fluctuations over the period.[6]

[6] Source: *Quarterly Regional Statistics - Second Quarter 2001*, BC Stats, September 2001.

Secondary School Graduates

High School Graduates
% of 18 Year Old Population
Vancouver CMA versus Regional BC



Source: BC Stats; Ministry of Education

Description

This indicator represents the number of Grade 12 students who have graduated in the school year beginning in the year noted including those graduating as a result of August provincial exams. It is expressed as a percentage of the population on July 1st of that year. Both public and private schools are included.

Why it's Important

Levels of education tend to correlate strongly with future personal prosperity and well-being. With the "knowledge" content of most jobs steadily increasing, high school graduation and above is deemed essential as a base qualification for other "higher learning".

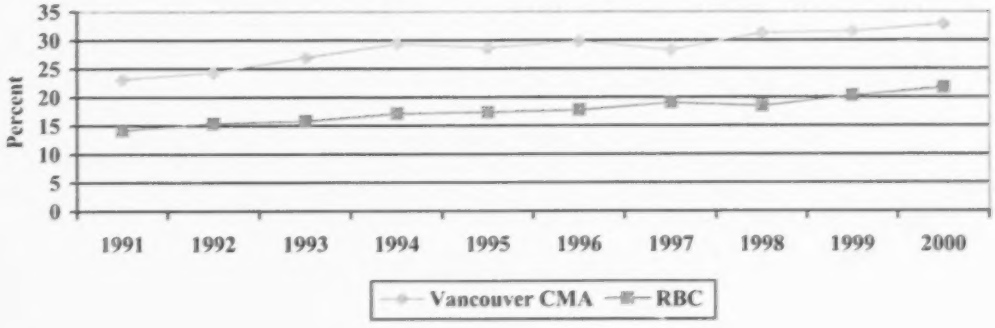
Analysis

In 1991, 68.3% of 18 years olds in Vancouver CMA graduated from high school. This was 5% higher than Regional BC, which posted a 63.3% high school graduation rate.

By 2000, both regions posted strong improvements in high school graduation rates for 18 year olds. Vancouver CMA increased its graduation rates to 81.8% of eighteen year olds, while Regional BC posted a smaller but nonetheless significant improvement to 72.4%.

University Completion

% of Population with University Completion (age 25 - 54)
Vancouver CMA versus Regional BC



Source: BC Stats; Statistics Canada, Labour Force Survey.

Description

This indicator measures the percentage of the population in British Columbia, aged 25 to 54, who have completed a university education. Excluded from the measure are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of 12-month survey results.

Why it's Important

Though there are many different forms of post-secondary credentialing, university completion is an important indication of an area's efforts to build "top" academic, managerial and entrepreneurial skills necessary for the increasingly knowledge driven economy.

Analysis

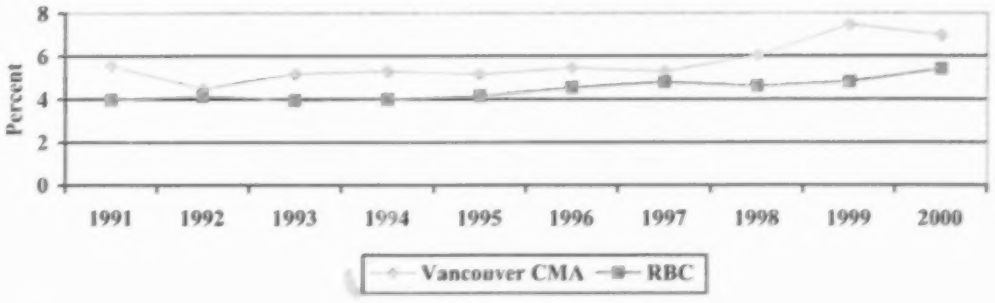
British Columbia experienced strong growth in the percentage of the population that completed university.

In 1991, 23.2% of Vancouver CMA's population aged 25 - 54 had completed university. By 2000, that figure had increased to 32.8% of the population, an improvement of 41.4%.

Regional BC experienced strong growth. The population completing university had increased from 14.2% of the population in 1991 to 21.7% in 2000, an improvement of 52.8%

Natural and Applied Sciences and Related Occupations

Natural and Applied Sciences as a % of Total Employment
Vancouver CMA versus Regional BC



Source: BC Stats; Statistics Canada, Labour Force Survey

Description

This indicator measures the percent of an area's workforce that is comprised of scientists and engineers.

Why it's Important

The number of scientists and engineers relative to the labour force is a key "proxy" for the creation, attraction and retention of people who possess knowledge and skill sets essential to the process of innovation and the creation of high paid employment.

Analysis

British Columbia has posted steady growth in the percentage of the population employed in natural and applied sciences since 1991.

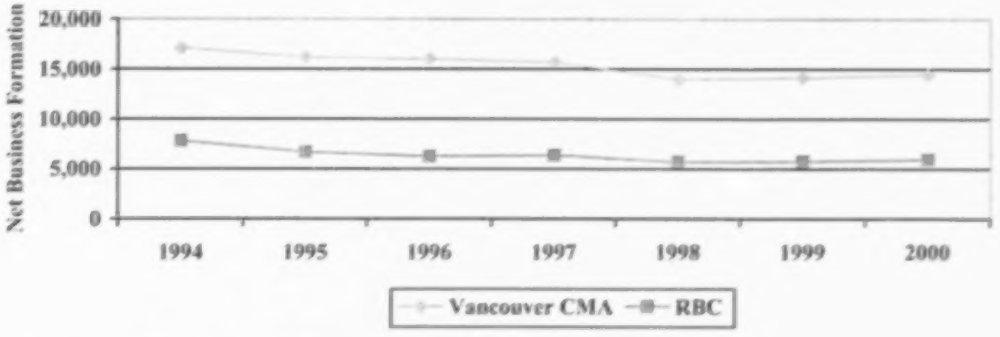
In 1991, Vancouver CMA had 46,400 employed in these occupations (5.6% of the population). By 2000, that number had grown to 73,000 (6.99% of the population), an increase of 57.3%.

Regional BC saw steadier growth than Vancouver CMA. In 1991, 29,400 were employed in these occupations (3.97% of the population), but by 2000 that number had grown to 49,000 (5.42% of the population), an increase of 66.7%.

Employment in natural and applied sciences and related occupations grew consistently in Regional BC from 1991 to 2000, except in 1998, which saw a small decrease.

New Business Formation

New Business Formation
Vancouver CMA versus Regional BC



Source: BC Stats; Ministry of Finance and Superintendent of Bankruptcies

Description

This indicator measures the number of new business formations by calculating the number of businesses incorporated per year minus the number of business bankruptcies. "Business incorporations" include firms incorporated under the *Companies Act*, BC Ministry of Finance. Incorporations can include holding companies as well as those actively carrying on as business. "Business bankruptcies" are attributable to liabilities incurred resulting from commercial activities.

Why it's Important

The growth of new business formations is an important measure of economic activity and entrepreneurialism.

Analysis

British Columbia has seen a decline in the number of new business formations.

In Vancouver CMA, the number of net new businesses formed decreased from 17,128 in 1994 to 14,441 in 2000, a decrease of 15.7%.

This trend was followed in Regional BC. In 1994, there were 7,824 net new businesses formed, but by 2000, the number of net new business formations had decreased by 23.8% to 5,965.

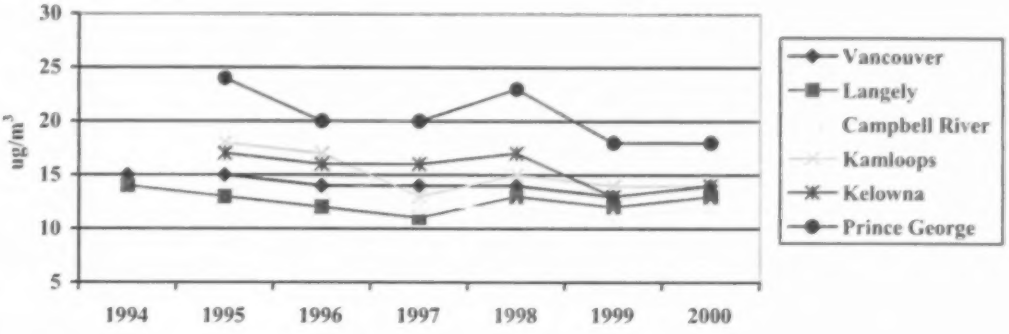
Environment, Health and Society

Regional Performance Indicators

11. Air Quality
12. Wastewater Treatment
13. Cancer Mortality
14. Life Expectancy at Birth
15. Low Birth Weight
16. Personal and Property Crime
17. Low Income Incidence

Air Quality

Average Annual Concentrations of PM $_{10}$ in Major Centres



Source: Ministry of Water, Land and Air Protection, 2001

Description

Air quality is measured by the amount of fine particulates in the air. Fine particulates include dust, dirt, liquid droplets and smoke. Most air quality monitors measure fine particulates under 10 microns (PM_{10}), but recent findings have shown that particles 2.5 microns or less ($PM_{2.5}$), pose the greatest health risk. Direct costs to health care resulting from poor air quality may be significant.

Factories, cars, power plants, construction activity, and numerous other man-made sources emit fine particulates.

Why it's Important

Air quality has direct effects on human health. Fine particulates may affect breathing, aggravate respiratory and cardiovascular disease, alter the body's defense systems, and damage lung tissue. Both premature mortality and emergency hospital visits increase during high concentrations of fine particulates.

Analysis

Concentrations of PM_{10} are generally higher in communities outside of the Greater Vancouver Regional District and Lower Fraser Valley, with the thirteen communities of "highest average annual concentration" being located in Regional BC.

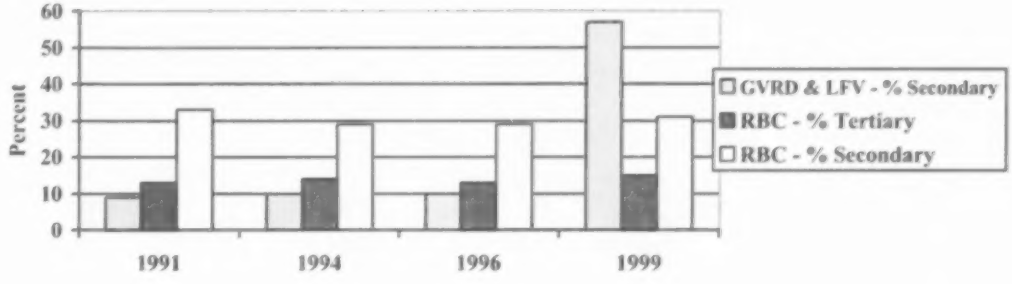
In the GVRD and Lower Fraser Valley, Mission and Richmond had the highest average annual concentrations of PM_{10}.

In Regional BC, Vernon, Golden, and Grand Forks had the highest average annual concentrations of PM_{10}, with levels almost twice as high as in the GVRD and LFV. Merrit also has very high average annual concentrations of PM_{10}.

For summary comparison, we have included a number of major cities throughout the province.

Wastewater Treatment

Percentage of Population Served by Secondary or Tertiary Wastewater Treatment Facilities GVRD & LFV versus Regional BC



Source: Environment Canada Municipal Water Use Database (MUD), 2001. Ministry of Water, Land and Air Protection, 2001.

Description

This indicator measures the total amount of the population in BC that is served by secondary or better wastewater treatment facilities. It compares the Greater Vancouver Regional District (GVRD) and Lower Fraser Valley (LFV) with Regional BC.

Wastewater may be treated in four steps: preliminary and primary treatment filters solid material, secondary treatment removes greater suspended material, and tertiary treatment aims to remove substances such as contaminants.

Why it's Important

Wastewater consists of human waste and harmful substances such as motor oil, pesticide residue, paint thinner, pharmaceuticals and solvents that threaten human health and ecological balance.

Municipal wastewater is seen as one of the largest sources of pollution in Canadian waters.

Analysis

In 1991, only 9% of the GVRD and LFV's population were served by secondary wastewater treatment facilities. None of the area's wastewater was treated by tertiary facilities.

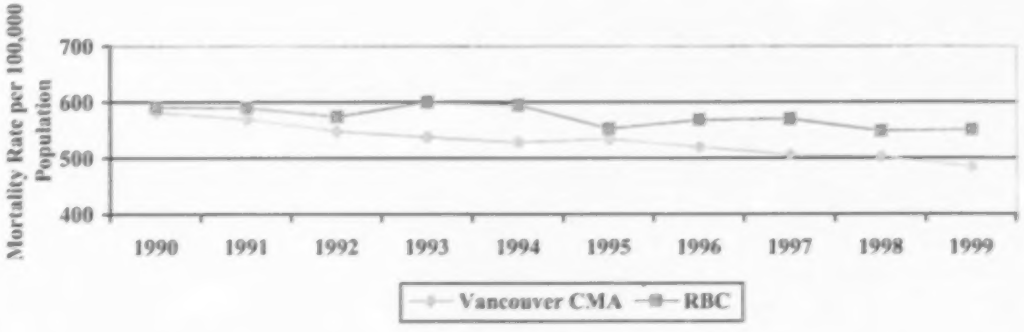
By 1999, 57% of the GVRD and LFV's population were served by secondary wastewater treatment facilities. None of the population was served by tertiary treatment facilities.

Regional BC saw a higher number of the population served by secondary or better treatment facilities throughout most of the decade. In 1991, 33% of the area's population was served by secondary facilities, while 13% was served by tertiary facilities.

In 1999, there had been little change in Regional BC's wastewater treatment. About 31% of the area's population was served by secondary facilities, while 15% was covered by tertiary facilities.

Cancer Mortality

Mortality Rate per 100,000 Population Age 45 and Older - Cancer
Vancouver CMA versus Regional BC



Source: BC Stats; BC Vital Statistics Agency

Description
Cancer is a disease in which abnormal cells form in human organs or tissue and grow to form a tumour. Two-thirds of all cancers are caused by a person's lifestyle, such as diet, physical activity, drinking and smoking habits. This indicator is a proxy for an area's propensity to make healthy lifestyle choices. Fully 95% of cancer deaths occur after the age of 45 years. The indicator is the total number of cancer deaths expressed as a percentage of the population 45 years of age and older.

Why it's Important
Cancer is one of the leading causes of death in Canada. Health Canada estimates that there will be 65,300 cancer deaths in 2001.

Approximately 40% of men and 35% of women will develop cancer. Fully 25% of men and 20% of women will die of cancer. Tobacco use is the leading cause of cancer deaths (30%) and is responsible for approximately 85% of lung cancer cases.

Analysis
Vancouver CMA has experienced a strong decrease in cancer mortality rates. In 1990, the area's cancer mortality rate was 582 deaths per 100,000 population, aged 45 years and older. By 1999, that figure had fallen to 485.3 deaths per 100,000 population, a decrease of 16.7%.

Regional BC saw a higher cancer mortality rate. In 1990, the mortality rate was 591.6 deaths per 100,000 population, and by 1999 the rate had fallen to 551 deaths, a decrease of 6.9%.

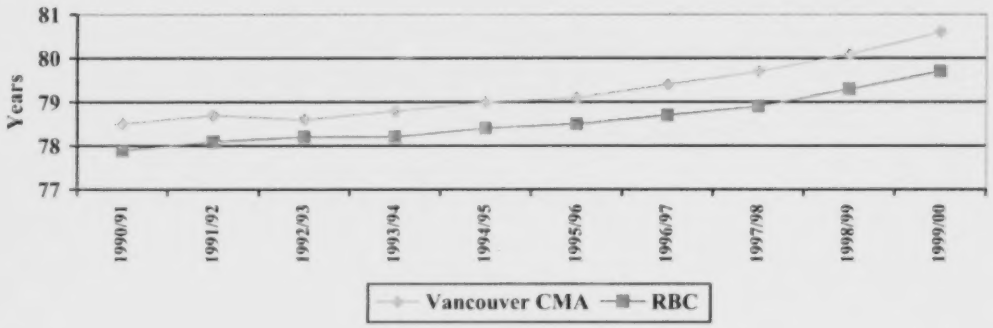
Vancouver CMA's cancer mortality rate fell consistently throughout the period, while Regional BC fluctuated.

In 1997, lung cancer was the leading cause of cancer related mortality for both men and women. Prostrate and colorectal cancers are the next highest cause of cancer related death in men, while breast and colorectal cancer is the next highest cause of cancer related death in women.[7]

[7] Source: *BC Cancer Mortality Trends 1977 - 1997*. BC Cancer Agency. March 1999.

Life Expectancy at Birth

Life Expectancy at Birth
Vancouver CMA versus Regional BC



Source: BC Stats

Description
Life expectancy at birth is the average number of years that a child is expected to live in its lifetime based on current mortality rates. This is a key indicator measuring the overall health of citizens in a jurisdiction.

Factors affecting life expectancy include access to health care, diet, environment, wealth and economic development.

Life expectancy is not uniform across the province. Rural and northern regions have a lower life expectancy than urban areas.

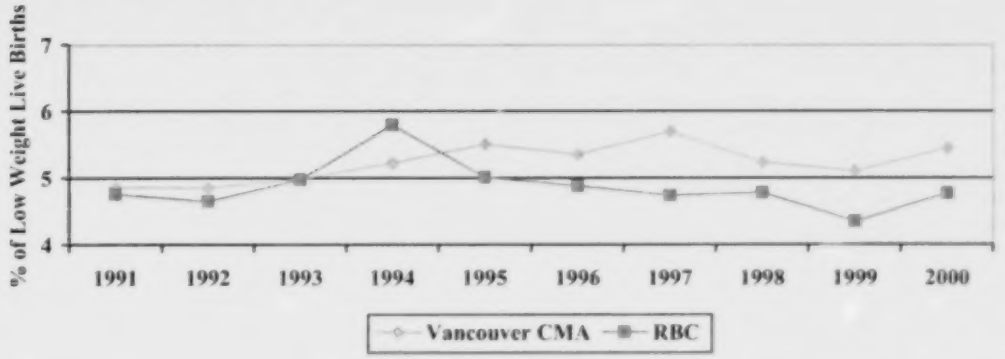
Why it's Important
This is a key indicator measuring the overall health of citizens in a jurisdiction.

Analysis
In 1990/91, Vancouver CMA posted a life expectancy at birth of 78.5 years. By 1999/00, life expectancy increased by 2.1 years to 80.6 years. The area posted consistent growth in life expectancy at an average rate of three and a half months per year.

Regional BC posted slightly less growth. In 1990/91 life expectancy at birth was 77.9 years. In 1999/00, life expectancy increased by 1.8 years to 79.7 years. Regional BC posted average growth in life expectancy of three months per year.

Low Birth Weight

Low Birth Weight - % of Live Births Below 2,500 Grams
Vancouver CMA versus Regional BC



Source: BC Stats; BC Vital Statistics Agency

Description
Newborns weighing less than 2,500 grams are considered to be low birth weight infants. This indicator is the number of live births where birth weight was less than 2500 grams expressed as a percentage of live births. Factors that contribute to low birth weight are socio-economic status, social support, stress and personal habits. This indicator serves as a "proxy" for overall social condition.

Why it's Important
Low birth weight newborns have a substantially higher rate of post birth illness and death. Long-term health problems, increased hospitalization rates and disabilities are associated with low birth weight.

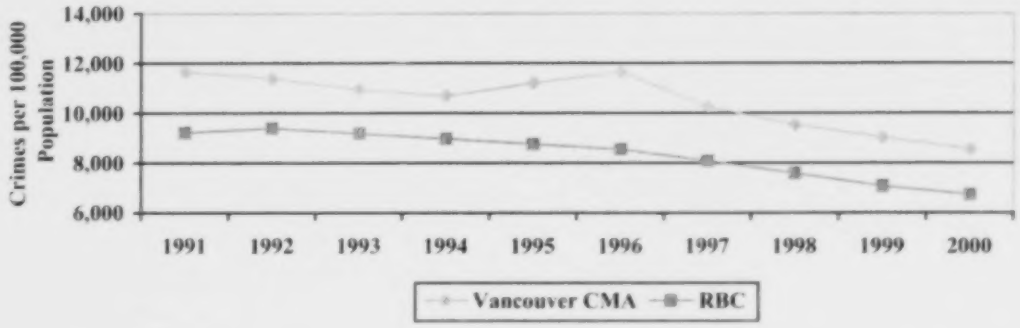
Analysis
In 1991, 4.9% of live births in Vancouver CMA were classified as low birth weight, or under 2,500 grams. In 2000, the number of low weight births increased to 5.45%. A peak was experienced in 1997 at 5.7%.

Regional BC saw a negligible increase in the number of low weight births for the same period. In 1991, 4.76% of births in Regional BC were less than 2,500 grams. In 2000, that figure had increased to 4.77%. The peak of the period was 1994, with 5.8% of all births being below 2,500 grams, the highest experienced in either of the areas.

Performance Indicator 16 Supplemental Information: BC Regional Comparison

Personal and Property Crime

Personal and Property Crime Incidents per 100,000 Population
Vancouver CMA versus Regional BC



Source: BC Stats; Ministry of Public Security and Solicitor General

Description

Personal and property crime rates are the number of reported incidents, expressed as a rate per 100,000 population. Personal crime includes those offences in the Criminal Code that deal with the application or threat of application, of force to a person, including homicide, attempted murder, assault, sexual-assault, robbery and abduction. Excluded are traffic incidents resulting in death or bodily harm. Property crime includes incidents involving unlawful acts with the intent of gaining property but do not involve the threat or use of violence e.g. theft, breaking and entering, fraud and possession of stolen goods.

Why it's Important

Crime rates tend to be an indicator of other social and economic problems. It can reflect lack of opportunities, inadequate education or social dysfunction. Crime is very costly to society, both from individual and community perspectives

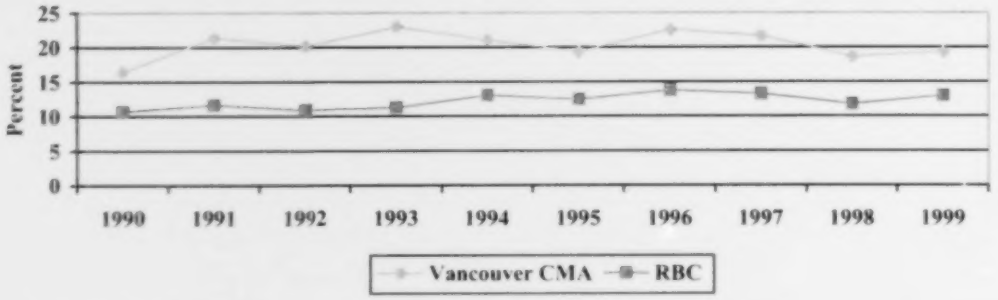
Analysis

In 1991, Vancouver CMA experienced 11,657 incidences of crime per 100,000 population. This was significantly higher than Regional BC which posted 9,225 crimes per 100,000 population.

From 1991 to 2000, Vancouver CMA and Regional BC posted nearly identical declines in the crime rate, with a 26.6% and 27% decline respectively. In 2000, Vancouver CMA's personal and property crime rate was 8,562 per 100,000 population, and Regional BC experienced a crime rate of 6,734 per 100,000 population.

Low Income Incidence

Low Income Incidence - Percent of Families and Unattached Individuals Below the After Tax Low Income Cut Off Vancouver CMA versus Regional BC



Source: BC Stats; Statistics Canada

Description

Canada, like most other countries, does not have an "official" definition of low-income incidence. The best-known measure is Statistics Canada's "unofficial" Low Income Cut-Off (LICO). This indicator measures the percentage of a population that lives in a low-level income situation below unofficial low-income incidence lines. The indicator is the ratio (prevalence) of families and unattached individuals in low income (after-tax) to the population of families and unattached individuals. Statistics Canada has set "Low Income Cut-Offs (LICO)" to be the income level at which 54.7% or greater income after tax is spent on food, shelter and clothing. The LICO is used across Canada and is stratified by family size and urban area size. Families are defined as two or more related persons sharing a dwelling unit; unattached individuals are persons living alone or with unrelated persons. (For further discussion, please refer to "Supplemental information" at page 55).

Why it's Important

A number of factors may lead to families placing below the LICO. These include: age (young or old), injury or illness, disability, family circumstances, addiction, lack of skills or education and unemployment (or underemployment).

Analysis

From 1990 to 1999, British Columbia saw a modest increase in the number of families below the after-tax Low Income Cut-Offs (LICO). For BC as a whole, 16.1% of the population falls below this level.

The Vancouver CMA area in 1990 saw 16.5% of families and individuals living below LICO. In 1999, the figure had grown to 19.4%. In 1993, Vancouver CMA saw a peak of 22.9% of the population below the LICO.

In Regional BC income inequalities posted far below Vancouver's. In 1990, 10.7% of families and individuals earned lower than the LICO. In 1999, the low-income incidence had grown to 13%. Regional BC experienced a peak of 13.6% in 1996.

This page left blank intentionally.

VI. Future Progress Board Work and Reporting

Over the coming months we intend to make any necessary refinements to our progress measurement framework. With the benchmarking baseline now established, we will also carry out further work on the advisory component of our mandate. As an initial step, we will shortly be releasing an "Economic Development Strategy Framework for BC", a document that explores the key policy options and levers available to improve prosperity in small, open market economy jurisdictions such as British Columbia. That study will complement the benchmarking work and, hopefully, offer further insight into the critical factors influencing economic growth and development touched on earlier in this report.

Looking ahead, we plan to pursue our advisory mandate through four task groups. Comprised of BC Progress Board members and staff, each group will consult as needed with interested parties and experts. The Task Groups and mandates are as follows:

- Education, Skills and Training. This Task Group will identify "best practices" and provide advice on ways to enhance education, skills and training in British Columbia, recognizing that "knowledge" has become a fundamental and increasingly important determinant of economic success.
- Project 250 -- Regional Economies. This Task Group will explore means and opportunities to promote development of the regional economies outside of the lower mainland. Based on the aggregate regional comparison information presented in this report, there is a "dichotomy" between the economic performance of Greater Vancouver and the "rest of BC". The intent of this Task Group is to consider strategies whereby regional and rural economies may be revitalized.
- Labour/Government/Business Relations. This Progress Board Task Group will liaise with and seek to build working relationships between these three parties as British Columbia undergoes economic change, transition and renewal.
- "Re-branding" BC. This Task Group will consult with government and other interests on issues related to promoting BC within and outside our borders for new business and investment opportunities. A primary objective will be to help ensure uniform messaging and coordination takes place among the disparate bodies that have a stake in "investment promotion".

The BC Progress Board intends to publish our main benchmarking report once per year. Between now and the next reporting date in December 2002 (or January 2003), the Progress Board will make any necessary refinements to the measurement framework outlined in this report. As noted at the outset, we consider our benchmarking work to be a ***"work in progress"***. We welcome your comments on the contents of this report, and your views and ideas on how to bring about economic renewal in British Columbia. E-mail us at ideas@bcprogressboard.com.

This page left blank intentionally.

Appendices

This page left blank intentionally.

A. Board Members

***Chair*:**

Mr. David Emerson
President & CEO
Canfor Corporation

***Members*:**

Mr. Lawrence Bates
President & CEO
Sun-Rype Products Ltd.

Mr. Alex A. Campbell
President
Thrifty Foods

Mr. Pat Corbett
Owner
The Hills Health Ranch

Mr. Herman Driediger
CEO
Eze Rent-it Centre Ltd.

Mr. Don Gould
President & Chief Operating Officer
The Pas Lumber Company Ltd.

Dr. Norman B. Keevil
Chairman
Teck Cominco Limited

Mr. Derek Lee
President
Prospero Int'l Realty Inc.

Mr. Jim Pattison
Chair, President & CEO
The Jim Pattison Group

Mr. Michael Phelps
Chair & CEO
Westcoast Energy Inc.

Dr. Martha Piper
President & Vice-Chancellor
University of British Columbia

Ms. Stephanie Sharp
Managing Director, Corporate Finance
Andersen

Mr. Ken Shields
President & CEO
Raymond James Ltd.

Mr. Mark Shuparski
President & CEO
Bentall Capital

Ms. Gerri Sinclair
President
Premier's Technology Council

***Executive Director*:**

Mr. Tim McEwan
Executive Director
BC Progress Board

B. Advisory Group Members

Mr. Jock Finlayson
Executive Vice President - Policy
Business Council of British Columbia

Dr. Rick Harris
Telus Professor of Economics
Simon Fraser University

Dr. Maurice Levi
Bank of Montreal Professor of International Finance
University of British Columbia

Mr. Helmut Pastrick
Chief Economist
Credit Union Central of British Columbia

C. Summary Progress Measurement Table

Please see table on the following page.

Note on Table: An arithmetic average and "overall indicative ranking" is included for summary comparison purposes only. Each Target and Performance Indicator should be viewed independently from one another with more emphasis being placed on the six "Target" measures for comparing British Columbia's overall performance.

Core Measures: Summary Overview BC and Other Provinces

	Economic Growth: Growth of Real GDP per Capita	Standard of Living: Real Pers. Disposable Income per Capita	Jobs: Employment to Population Ratio	Average Hourly Earnings	Productivity	Total Exports per Capita	Tax Payer Supported Debt	Per Capita Tax Burden	Top Marginal Tax Ratio	Provincial Deficit/Surplus	Net Inter-Provincial Migration	Business Gross Fixed Capital Formation	Secondary School Graduates	University Completion	R&D as a % of GDP	Natural and Applied Sciences and Related Occupations	Arithmetic Average	Overall Indicative Rank	Environmental Quality	Life Expectancy at Birth	Low Income Incidence	Air Quality	Greenhouse Gas Emissions	Wastewater Treatment	Protected Areas	Cancer Mortality	Low Birth Weight	Personal and Property Crime	Arithmetic Average	Indicative Overall Rank
Year	2000	2000	2000	2000	2000	2000	2000/01	2000/01	2001	2000/01	2000/01	2000	1999	2000	1998	2000				1998	1999	2000	1996	1999	2001	1997	1998	2000		
BC	**6**	**3**	**5**	**2**	**5**	**7**	**2**	**7**	**3**	**3**	**8**	**6**	**9**	**2**	**6**	**4**	**4.88**	**3**	**1**	**1**	**6**	**2**	**3**	**5**	**1**	**3**	**2**	**10**	**3.40**	**1**
AB	3	2	1	3	1	2	1	5	1	1	1	1	10	6	4	3	2.81	1	4	3	5	7	10	2	2	2	10	7	5.20	5
SK	5	8	3	7	3	3	4	8	2	2	10	3	7	7	7	10	5.56	5	4	4	2	5	9	1	6	1	3	9	4.40	4
MB	8	4	2	6	7	5	3	6	4	8	7	10	8	3	8	6	5.94	6	3	6	8	4	6	3	4	6	6	8	5.40	6
ON	4	1	4	1	2	1	5	9	4	5	2	8	6	1	1	1	3.44	2	2	2	4	3	5	4	3	5	8	4	4.00	2
QB	2	5	7	4	4	4	8	10	10	7	6	9	3	4	2	2	5.44	4	7	5	10	6	1	7	8	9	9	5	6.70	8
NB	10	7	9	8	8	6	7	3	6	6	4	5	1	8	9	7	6.50	8	9	6	3	4	8	6	10	7	4	3	6.00	7
NS	9	6	8	9	9	10	10	4	7	10	5	4	4	5	3	8	6.94	9	8	8	7	n/a	7	8	5	10	7	6	7.33	10
PE	7	9	6	10	10	9	6	2	8	9	3	7	2	9	10	9	7.25	10	4	9	1	1	2	9	9	4	1	2	4.20	3
NF	1	10	10	5	6	8	9	1	9	3	9	2	5	10	5	5	6.13	7	9	10	9	n/a	4	10	7	8	5	1	7.00	9

Year	2000	2000	2000	2000	2000	2000	2000	2000/01	2001	2000/01	2000/01	2000	1999	2000	1998	2000				1998	1999	2000	1999	1999	2001	1997	1998	2000		
BC	**3**	**7**	**6**	**10**	**4**	**4**	**5**	**6**	**1**	**5**	**3**	**4**	**1**	**4**	**9**	**6**	**4.88**	**3**	**n/a**	**4**	**8**	n/a	**9**	**n/a**	**n/a**	**9**	**2**	**3**	**5.83**	**6**
AB	1	1	9	8	7	7	1	2	2	2	4	1	6	8	1	9	4.31	1	n/a	5	6	n/a	8	n/a	n/a	3	8	2	5.33	4
SK	2	2	8	4	2	2	3	1	3	3	9	8	2	5	10	8	4.50	2	n/a	7	3	n/a	7	n/a	n/a	4	7	10	6.33	10
MB	4	3	5	3	9	10	8	3	7	9	5	6	9	1	8	1	5.69	7	n/a	8	2	n/a	3	n/a	n/a	6	6	7	5.33	4
ON	8	5	3	7	6	6	2	7	8	6	7	5	4	3	3	2	5.13	4	n/a	3	7	n/a	4	n/a	n/a	2	5	4	4.17	1
QB	6	6	2	5	3	3	6	9	6	8	6	3	5	7	5	3	5.19	5	n/a	2	5	n/a	6	n/a	n/a	5	10	8	6.00	7
NB	9	8	7	2	8	9	4	10	5	7	1	7	3	9	6	7	6.38	8	n/a	9	4	n/a	2	n/a	n/a	8	9	5	6.17	9
NS	10	10	4	6	5	5	9	8	9	1	10	10	7	2	2	5	6.44	9	n/a	6	1	n/a	10	n/a	n/a	7	3	1	4.67	2
PE	5	9	1	9	10	8	7	4	10	9	8	2	10	10	4	10	7.25	10	n/a	5	n/a	n/a	5	n/a	n/a	1	4	6	6.00	7
NF	7	4	10	1	1	1	10	5	4	4	2	9	8	6	7	4	5.19	5	n/a	1	9	n/a	1	n/a	n/a	10	1	9	5.17	3

Period	1991 - 2000	1991 - 2000	1991 - 2000	1991 - 2000	1991 - 2000	1991 - 2000	1991/92 - 2000/01	1991/92 - 2000/01	1992 - 2001	1991/92 - 2000/01	1991/92 - 2000/01	1991 - 2000	1990 - 1999	1991 - 2000	1990 - 1998	1991 - 2000				1990 - 1998	1990 - 1999	1991 - 2000	1990 - 1999	1991 - 1999	2001	1990 - 1997	1990 - 1998	1991 - 2000		
BC	**10**	**10**	**10**	**2**	**8**	**10**	**6**	**3**	**4**	**4**	**8**	**10**	**3**	**2**	**6**	**3**	**6.19**	**8**	**n/a**	**1**	**7**	**n/a**	**2**	**1**	**n/a**	**4**	**3**	**5**	**3.29**	**2**
AB	2	7	5	1	4	9	1	1	1	1	1	1	8	10	3	8	3.94	1	n/a	5	2	n/a	7	8	n/a	7	6	1	5.14	4
SK	6	6	8	4	2	4	2	10	2	2	6	7	10	4	4	7	5.25	4	n/a	10	1	n/a	10	2	n/a	5	7	10	6.43	7
MB	8	8	3	5	6	6	3	7	3	10	5	5	9	7	8	2	5.94	7	n/a	9	5	n/a	5	7	n/a	8	5	9	6.86	9
ON	4	9	6	3	3	2	8	6	6	3	2	8	5	8	2	1	4.75	3	n/a	3	6	n/a	1	6	n/a	2	8	2	4.00	3
QB	5	4	4	8	5	5	9	8	9	7	4	9	1	1	1	5	5.31	5	n/a	2	4	n/a	3	3	n/a	3	4	3	3.14	1
NB	7	1	2	6	10	7	7	5	5	6	9	4	7	5	10	10	6.31	9	n/a	8	3	n/a	9	10	n/a	9	9	8	8.00	10
NS	9	3	7	10	7	8	5	4	8	9	10	3	4	9	5	9	6.88	10	n/a	6	10	n/a	6	4	n/a	6	1	4	5.29	5
PE	3	5	1	7	9	3	10	9	7	8	3	6	6	3	9	4	5.81	6	n/a	7	9	n/a	4	5	n/a	1	10	7	6.14	6
NF	1	2	9	9	1	1	4	2	10	4	7	2	2	6	7	6	4.56	2	n/a	4	8	n/a	8	9	n/a	10	2	6	6.71	8

D. Glossary of Terms

Economy, Innovation and Education

Real GDP Per Capita ($1997)	Is a measure of the size of the economy expressed on a per person basis. The Gross Domestic Product is the value added to the economy by the current productive activities of individuals, businesses, governments and non-residents (who may purchase and sell goods and services to British Columbians). The provincial GDP includes all activities that take place within its borders. The "real" or constant dollar estimates are inflation adjusted and expressed in terms of a base year, in this case, 1997. Constant dollar estimates are calculated by dividing current dollar data by a price index that measures changes in the prices of specific goods and services relative to 1997. Thus "real" GDP measures real change in the value of the economy by excluding that change which is the result of inflation. The July 1 population estimate is used to calculate the per capita values.
Real Personal Disposable Income Per Capita ($1997)	Is the value, adjusted to remove the effects of inflation, of personal income left after the payment of direct taxes (i.e. income taxes, property taxes, contributions to social security programs etc.) and various fees such as medical insurance premiums expressed on a per person basis. Personal income includes all income received by persons who are residents of the province, whether earned at home or elsewhere. This includes earnings and transfers - wages and salaries, employer contributions to pensions, EI, CPP, WCB etc., military pay and allowances, net income of farm operators and unincorporated businesses, interest and miscellaneous investment income and government transfers such as welfare and EI benefits. Constant (real) dollar estimates are calculated by dividing current dollar data by a price index that measures changes in the prices of consumer goods and services relative to 1997. The July 1 population estimate is used to calculate the per capita values.
Employment to Population Rate (15 to 64)	Is the number of employed persons aged 15 to 64 (i.e. working for pay or profit, doing unpaid work contributing to the operation of a family farm or business or with a job but absent from work in the survey week) expressed as a percentage of the population aged 15 to 64. Excluded are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve monthly survey results.

Average Hourly Earnings	Is based on payroll and hours worked data for employees whose basic wage is expressed as an hourly rate (about half of employees fall into this category). Information is gathered from all employers in Canada for whom T-4 Supplementary Forms must be completed, except for those in agriculture, fishing and trapping, private household services, religious organizations and military personnel. Data is collected for the last pay week of each month and annual figures are the weighted averages of the twelve monthly surveys. Average hourly earnings are calculated by dividing the total weekly payroll (for employees paid by the hour) by the total weekly paid hours for those employees. Payroll is the gross amount before deductions for income tax, EI, CPP, etc. and includes overtime pay, bonuses and other special payments. Excluded are taxable benefits and employer contributions to pension plans, EI, CPP, etc. Employee numbers include both full and part-time/part-week.
Productivity (Business Sector)	Labour productivity is a measure of the overall efficiency of the economy. It is calculated as the ratio of constant dollar GDP (or output) to total worker-hours (a measure of the quantity of labour used in production). Worker-hours are equal to the number of people employed times average hours worked in a year. The labour productivity estimates are for the business sector, which includes all industries in the economy except for government, health care, education, and the imputed rental income component of GDP. These industries are excluded because their output is not an identifiable product (such as engineering services or haircuts). GDP measures for these industries are often closely linked to wage data so by definition, there can be little or no productivity growth. Imputed rental income is a measure of the potential rental income that is foregone by homeowners and does not have any corresponding employment.
Total Exports per Capita ($1997)	Is the ratio of the total value of exports in a given calendar year to the population as of July 1st in that year. Exports include all types of goods and services that are produced in a given province but consumed outside its boundaries. Service exports are primarily services such as transportation, storage and insurance, which are provided to non-residents who export or import goods that are transported through a province, or enter or leave the country through its customs ports. Both interprovincial and international exports are included in the total.

Tax Payer Supported Debt to GDP	The appropriate measure of net public debt burden in relation to the size of the gross domestic product (GDP). Taxpayer-supported debt includes government direct debt, and the guaranteed and non-guaranteed debt of taxpayer-supported Crown corporations and agencies that require a subsidy from the provincial government.
Per Capita Tax Burden (Consolidated Provincial and Local Governments - FMS)	Estimates of the per capita tax burden include the following (on a per capita basis): • Income taxes (personal, corporate, and specific mining and logging taxes) • Consumption taxes (sales taxes, taxes on alcohol, tobacco, gasoline and motive fuels, amusement taxes, and profits from liquor and gaming operations) • Property taxes (taxes on land and capital) • Other taxes (payroll taxes, fees for motor vehicle licences, natural resource taxes and licences, and other miscellaneous taxes) • Health insurance premiums • Contributions to social insurance plans.
Top Marginal Tax Rate	To arrive at the top marginal personal income tax rate, the peak marginal tax rate at the provincial level is added to the peak rate set by the federal government.
Provincial Deficit/Surplus Levels	A deficit is an excess of expenditure over government revenue, while a surplus is an excess of revenue over expenditure.
Net Interprovincial Migration	Is the difference between those moving to British Columbia from the rest of Canada and those leaving British Columbia to take up residence elsewhere in Canada.
Business Investment	Is described as Business Gross Fixed Capital Formation and is the expenditure by business on durable assets and on building and engineering construction. Also included is residential construction by individuals, alterations and improvements made to the stock of buildings and transfer costs paid on the sale of existing fixed assets. The constant dollar estimates are inflation adjusted and expressed in terms of a base year, in this case, 1997. Constant dollar estimates are calculated by dividing current dollar data by a price index that measures changes in the prices of specific goods and services relative to 1997. Gross Fixed Capital Formation is a component of the Gross Domestic Product.

Secondary School Graduates	Is the number of students graduating from secondary schools per 1,000 population 18 years of age (at July 1 each year). For graduation, the year indicated is the end of the academic year. Secondary school graduations for Quebec include graduates from adult and trade/vocational programs. Graduates of night school and correspondence courses for Ontario adults are excluded. Public, private and federal schools are included.
University Completion Rate	Is the number of persons with a university degree expressed as a percentage of the population between 25 and 54 years of age. Excluded are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve monthly survey results.
Research and Development as a Per Cent of GDP	Is the sum of expenditures reported by (or estimated for) performing sectors - government, business, higher education and private non-profit organizations - for research and development activity in Canada expressed as a percentage of the Gross Domestic Product. The Gross Domestic Product is the value added to the economy by the current productive activities of individuals, businesses, governments and non-residents.
Natural and Applied Sciences Employment as a Per Cent of Total Employment	Is number of persons employed in occupations in Natural and Applied Sciences expressed as a percentage of total employment. Included are occupations in the physical sciences, engineers, architects, mathematicians, systems analysts and programmers and associated technical occupations. Excluded are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve monthly survey results.

Financial Management System (FMS) - Government Sector	This is an accounting system for government statistics that puts data for federal, provincial and local governments on a consistent basis by using the same definition of government for all jurisdictions. Data are based on public accounts, estimates, and budget information released by the various levels of government, but have been reworked to include all agencies that are under the direct control of the government, whether or not their activities have been reported in the public accounts of the various jurisdictions. Provincial government data includes, in addition to government ministries or departments, agencies such as the Workers' Compensation Board, financing authorities, and other agencies of government such as the BC Assessment Authority in the case of British Columbia. By including all government-controlled agencies, it is possible to make more meaningful comparisons of the footprint governments leave in each jurisdiction. Consolidated provincial/local figures have been amalgamated to ensure that inter-government transfers between provincial and local governments are not double-counted.

Environment, Health and Society

Life Expectancy at Birth	The average number of remaining years of life at birth based on current mortality rates.
Low Income Incidence	Is the ratio (prevalence) of families and unattached individuals in low income (after tax) to the total population of families and unattached individuals. Statistics Canada has set Low Income Cut-Offs (LICOs) to be the income level at which 54.7% or greater of income after tax is being spent on food, shelter and clothing. The same LICO is used across Canada but is stratified by family size and urban area size. This measure of low income is used in absence of any official low income incidence measure in Canada. Families are defined as two or more related persons sharing a dwelling unit; unattached individuals are persons either living alone or with other unrelated person(s).

Air Quality	Air quality is measured by the amount of fine particulates in the air. Fine particulates include dust, dirt, liquid droplets and smoke. Most air quality monitors measure fine particulates under 10 microns (PM_{10}), but recent findings have shown that particles 2.5 microns or less ($PM_{2.5}$), pose the greatest health risk. Direct costs to health care resulting from poor air quality may be significant. Factories, cars, power plants, construction activity, and numerous other man-made sources emit fine particulates. Monitoring for PM_{10} is relatively new in Canada and most continuous monitoring stations do not have more than 5 or 6 years of data
Greenhouse Gas Emission	The number of tonnes of greenhouse gases are emitted per person. Greenhouse gases include carbon dioxide, ozone, methane and nitrous oxide.
Wastewater Treatment	The amount of wastewater treated in Canada from residential and industrial origins. Wastewater consists of human waste and harmful substances such as motor oil, pesticide residue, paint thinner, pharmaceuticals and solvents that threaten human health and ecological balance. Wastewater may be treated in four steps: preliminary and primary treatment filters solid material, secondary treatment removes greater fecal material, and tertiary treatment aims to remove substances such as contaminants.
Protected Areas	The overall percentage of a jurisdiction's land base that is included within parks or protected areas. In British Columbia, protected areas consist of national parks, ecological reserves, class A and C parks, recreation areas and protected areas under the Environment and Land Use Act.
Cancer Mortality	The number of deaths due to cancer (as the underlying cause of death) per 100,000 population, adjusted for the age mix of the population. Death rates are standardized to allow comparisons of regions with differing age structures.
Low Birth Weight	Is the number of live births where birth weight was less than 2,500 grams expressed as a percentage of total live births.

Personal and Property Crime	Is the number of incidents, based on the most serious offence, known to the police, expressed as a rate per 100,000 population. Personal crime includes those offences in the Criminal Code that deal with the application or threat of application, of force to a person, including homicide, attempted murder, assault, sexual-assault, robbery and abduction. Excluded are traffic incidents resulting in death or bodily harm. Property crime includes incidents involving unlawful acts with the intent of gaining property but do not involve the threat or use of violence e.g. theft, breaking and entering, fraud and possession of stolen goods.

Supplemental Information: US Comparisons

Real Per Capita GDP	This indicator is computed using real GDP at market prices measured in $1997 for Canadian provinces. For U.S. states, real GDP is computed using nominal Gross State Product (GSP), which is a similar concept to GDP in Canada, the chained GSP price deflator with a 1996 reference year, and the PPP Canada-U.S. exchange rate for 1997. To compute real GDP in 1997 Canadian dollars, the GSP deflator is re-indexed to a 1997 reference year, multiplied by the 1997 value of the PPP exchange rate, and divided into nominal GSP. (Source: Bureau of Economic Analysis - www.bea.doc.gov)
Real Disposable Income Per Capita	Personal disposable income is measured on a National Accounts Basis. The U.S. data are converted to Canadian dollars using the latest historical OECD PPP exchange rate estimates for GDP for Canada and the United States. (Source: Bureau of Economic Analysis - www.bea.doc.gov, Population: US Census Bureau - www.census.gov)
Employment-Population Ratio	This ratio is computed by dividing total employment for an area by its total population. Source: (Employment: US Bureau of Labor Statistics - www.bls.gov; Population: US Census Bureau - www.census.gov)

Average Hourly Earnings	Average hourly earnings are computed using average weekly earnings and average weekly hours data for the economy as a whole. The U.S. weekly earnings data are multiplied by the OECD PPP exchange rates to convert them to Canadian dollars. (Source: US Bureau of Labor Statistics - www.bls.gov)
Hourly Labour Productivity	Productivity is calculated as the ratio of real GDP at market prices and total hours worked. The latter measure is the product of total employment, average weekly hours, and 52 weeks. The construction of the components of productivity was described above.
Unit Labour Costs	This measure is computed as the ratio of labour costs measured in Canadian dollars to real GDP measured in 1997 Canadian dollars. In computing this measure, the calculation of U.S. labour costs differs from that used to compute average hourly earnings described above. In the current measure, labour costs are converted to Canadian dollars using the actual Canada-U.S. exchange rate. For average hourly earnings, the OECD PPP exchange rate was used.
Taxpayer Supported Debt as a Percentage of GDP	Taxpayer supported debt indicates the magnitude of the public debt relative to gross domestic product and is measured by the debt-to-GDP ratio. The higher the ratio, the higher the tax burden on taxpayers. (Source: US Census Bureau - www.census.gov)
Per Capita Tax Burden – Consolidated Provincial (State) and Local	Per capita tax burden looks at the burden of combined provincial (state) and local taxes distributed on a per person basis. (Source: US Census Bureau - www.census.gov)
Top Marginal Personal Income Tax Rate	To arrive at the top marginal personal income tax rate at the state level, the peak marginal tax rate at the state level is added to the peak marginal tax rate set at the federal level by the Internal Revenue Service (IRS). (Source: State Tax Rates – California - www.ftb.ca.gov, Oregon - http://www.dor.state.or.us, Washington - http://dor.wa.gov/Contact/con_main.asp; Federal Tax Rate: Internal Revenue Service - www.irs.gov)

Net Inter-provincial (Net Inter-state) Migration	This measure looks at net inter-provincial (inter-state) migration relative to the population of the respective province (state). A ratio above zero indicates a net addition to the population. Individuals moving to the province (state) *see the area as an attractive location to live and work.* A ratio below zero indicates a net decline in the population. In this case the province (state) is seen as a less desirable place to live and work. (Source: US Census Bureau - www.census.gov)
Research and Development	Research and development expenditures represent total private and public industrial expenditures. (Source: National Science Foundation - http://caspar.nsf.gov)
Air Quality	Air quality is defined as the number of particulates under 10 microns per cubic meter of air. Particles under 10 microns are seen as a health hazard since they can settle in the lungs and over time result in cardiovascular disease. Poor air quality is especially a risk to the elderly and those with existing breathing problems. (Source: Environmental Protection Agency Air Data Database - http://www.epa.gov)
Low Birth Weight	Newborns weighing less than 2,500 grams (5.5 pounds) are classified as low birth weight infants. The factors that might contribute to a low birth weight baby include socio-economic status, social support, stress and personal habits. Low birth weight babies are prone to higher rates of illness and have a higher probability of hospitalization, future health problems and disabilities.
Personal and Property Crime	The violent and property crime rate is based on the number of reported crimes per 100,000 people. Violent crime includes all degrees of murder, rape, robbery and assault. Property crime includes burglary, theft and arson. A lower crime rate indicates a higher perceived sense of security. (Source: Federal Bureau of Investigation - www.fbi.gov and the Statistical Abstract of the United States - http://www.census.gov/prod/www/statistical-abstract-us.html)

Purchasing Power Parity (PPP) Exchange Rate	The PPP exchange rate, which is published by the OECD, measures the average price of all goods and services produced in a country relative the price of goods and services produced in the United States. The goods and services covered are those that make up a country's GDP. The PPP is different from the actual Canada-United States exchange rate, which measures the cost in Canadian dollars of purchasing a United States dollar.

Supplemental Information: BC Regional Comparisons

Economy, Innovation and Education

Employment	Is the number of persons working for pay or profit, doing unpaid work contributing to the operation of a family farm or business or with a job but absent from work in the survey week. Excluded are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve monthly survey results.
Employment to Population Rate (15 to 64)	Is the number of employed persons aged 15 to 64 (i.e. working for pay or profit, doing unpaid work contributing to the operation of a family farm or business or with a job but absent from work in the survey week) expressed as a percentage of the population aged 15 to 64. Excluded are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve monthly survey results.
Employment Income	Is the aggregate of employment and self-employment income reported on tax returns as reported by Canada Customs and Revenue Agency. For tax purposes employment/self-employment income includes wages and salaries, taxable allowances, benefits, commissions, tips and gratuities as well as net income from fishing and farming operations, net professional and unincorporated business income and net commission income.

Manufacturing Shipments	Is data collected through surveys or administrative records of all manufacturers in Canada. The value of manufacturing shipments is the net selling value of goods made by the reporting establishments, or for their own accounts, from their own materials. Excluded are discounts, returns, allowances, taxes, duties, returnable containers, and contracted transportation charges for outward shipments. Included are transfers to other establishments of same companies, value of non-returnable containers, and book value of goods produced and shipped for the first time on a rental basis. Also included are consignment shipments to other countries.
Retail Sales	Is the aggregate sales made through retail locations. Excluded are direct sales which bypass the retail store such as vending machines, door-to-door, printed materials sold directly by the publisher such as newspapers and magazines, book and record clubs, and sales by businesses whose major activity is not retailing. However, catalogue/mail-order sales of businesses classed as "general merchandise stores" are included. Sales include all receipts of retailers including food serving, repairs and rentals net of returns, adjustments and discounts. Excluded are sales taxes and non-operating revenue.
Housing Starts	Is the count of dwelling units in new structures designated for non-transient year-round occupancy. The start is recorded when the footing is installed. All new dwelling units are counted for urban areas of 10,000 or greater population. Smaller areas are sampled and an estimate for these is included in the information reported.
Non-Residential Building Permits	Is the value of building permits issued by municipalities and regional districts and reported to Statistics Canada for industrial, commercial, and institutional and government new buildings as well as alterations, renovations and additions to non-residential buildings.
Secondary School Graduates	Is the number of Grade 12 students who have graduated in the school year beginning in the indicated year including those graduating as a result of August provincial exams expressed as a percentage of the population 18 years old on July 1 of that year. Both public and private schools are included.
University Completion Rate	Is the number of persons with a university degree expressed as a percentage of the population between 25 and 54 years of age. Excluded are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve monthly survey results.

Natural and Applied Sciences Employment as a Per Cent of Total	Is number of persons employed in occupations in Natural and Applied Sciences expressed as a percentage of total employment. Included here are occupations in the physical sciences, engineers, architects, mathematicians, systems analysts and programmers and associated technical occupations. Excluded are persons in institutions, full-time members of the Armed Forces and persons living on Indian Reserves. Annual numbers are the average of the twelve monthly survey results.
Business Incorporations	Is the number of firms incorporated under the Companies Act, BC Ministry of Finance. Incorporations can include holding companies as well as those actively carrying on business.
Business Bankruptcies	Is the number of bankruptcies which are chiefly attributable to liabilities incurred as a result of carrying on a commercial venture or business and includes partnerships, proprietorships and limited companies. This is under federal bankruptcy legislation.
Population	Refers to the number of Canadians and Non-permanent Residents whose usual place of residence is within the referenced geographic boundaries.

Environment, Health and Society

Air Quality	Air quality is measured by the amount of fine particulates in the air. Fine particulates include dust, dirt, liquid droplets and smoke. Most air quality monitors measure fine particulates under 10 microns (PM_{10}), but recent findings have shown that particles 2.5 microns or less ($PM_{2.5}$), pose the greatest health risk. Direct costs to health care resulting from poor air quality may be significant. Factories, cars, power plants, construction activity, and numerous other man-made sources emit fine particulates. Monitoring for PM_{10} is relatively new in Canada and most continuous monitoring stations do not have more than 5 or 6 years of data

Wastewater Treatment	The amount of wastewater treated in Canada from residential and industrial origins. Wastewater consists of human waste and harmful substances such as motor oil, pesticide residue, paint thinner, pharmaceuticals and solvents that threaten human health and ecological balance. Wastewater may be treated in four steps: preliminary and primary treatment filters solid material, secondary treatment removes greater fecal material, and tertiary treatment aims to remove substances such as contaminants.
Cancer Mortality	Is the total number of cancer deaths expressed as a percentage of the population 45 years of age and older. Since age-standardized data is not available sub-provincially, and as 95% of cancer deaths are to persons 45 years and older, this base was used to calculate the percentages and thus reduce the distortion caused by differing age structure in the sub-provincial areas.
Life Expectancy at Birth	The average number of remaining years of life at birth based on current mortality rates.
Low Birth Weight	Is the number of live births where birth weight was less than 2,500 grams expressed as a percentage of total live births.
Personal and Property Crime Rate	Is the number of incidents, based on the most serious offence, known to the police, expressed as a rate per 100,000 population. Personal crime includes those offences in the Criminal Code that deal with the application or threat of application, of force to a person, including homicide, attempted murder, assault, sexual-assault, robbery and abduction. Excluded are traffic incidents resulting in death or bodily harm. Property crime includes incidents involving unlawful acts with the intent of gaining property but do not involve the threat or use of violence e.g. theft, breaking and entering, fraud and possession of stolen goods.
Low Income Incidence	Is the ratio (prevalence) of families and unattached individuals in low income (after tax) to the total population of families and unattached individuals. Statistics Canada has set Low Income Cut-Offs (LICOs) to be the income level at which 54.7% or greater of income after tax is being spent on food, shelter and clothing. The same LICO is used across Canada but is stratified by family size and urban area size. This measure of low income is used in absence of any official low income incidence measure in Canada. Families are defined as two or more related persons sharing a dwelling unit; unattached individuals are persons either living alone or with other unrelated person(s).

E. Detailed Tables – Core Targets and Performance Indicators

Economy, Innovation and Education

Economic Growth A: Real GDP Per Capita (in 1997 Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC	**28,521**	**28,312**	**28,630**	**28,656**	**28,478**	**28,538**	**28,940**	**29,147**	**29,747**	**30,664**
AB	31,472	31,653	33,343	34,938	35,519	35,842	37,776	38,522	38,549	40,035
SK	24,976	23,843	25,539	26,547	26,811	27,188	28,589	29,343	29,709	30,764
MB	23,651	23,924	23,891	24,583	24,588	25,228	26,218	27,319	27,966	28,658
ON	29,036	28,883	28,905	30,243	30,965	30,908	32,002	33,146	35,167	36,510
QB	23,581	23,584	23,813	24,620	24,954	25,178	25,951	26,758	28,045	29,138
NB	20,038	20,549	20,995	21,395	21,985	22,238	22,398	23,218	24,248	24,644
NS	20,586	20,811	20,858	20,896	21,213	21,216	21,817	22,543	23,721	24,245
PE	18,108	18,443	18,621	19,299	20,207	20,713	20,496	21,635	22,304	22,971
NF	17,676	17,343	17,576	18,579	19,215	18,640	19,088	20,912	22,477	23,901
CAN	26,740	26,668	26,996	27,963	28,418	28,543	29,513	30,418	31,733	32,915

Source: BC Stats; Statistics Canada, Provincial Economic Accounts, Catalogue 13-213

Economic Growth B: Growth of Real GDP Per Capita (Percent Change Over Previous Year)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**-0.7**	**1.1**	**0.1**	**-0.6**	**0.2**	**1.4**	**0.7**	**2.1**	**3.1**	**6**	**3**	**10**
AB	0.6	5.3	4.8	1.7	0.9	5.4	2.0	0.1	3.9	3	1	2
SK	-4.5	7.1	3.9	1.0	1.4	5.2	2.6	1.2	3.6	5	2	6
MB	1.2	-0.1	2.9	0.0	2.6	3.9	4.2	2.4	2.5	8	4	8
ON	-0.5	0.1	4.6	2.4	-0.2	3.5	3.6	6.1	3.8	4	8	4
QB	0.0	1.0	3.4	1.4	0.9	3.1	3.1	4.8	3.9	2	6	5
NB	2.6	2.2	1.9	2.8	1.2	0.7	3.7	4.4	1.6	10	9	7
NS	1.1	0.2	0.2	1.5	0.0	2.8	3.3	5.2	2.2	9	10	9
PE	1.9	1.0	3.6	4.7	2.5	-1.0	5.6	3.1	3.0	7	5	3
NF	-1.9	1.3	5.7	3.4	-3.0	2.4	9.6	7.5	6.3	1	7	1
CAN	-0.3	1.2	3.6	1.6	0.4	3.4	3.1	4.3	3.7	-	-	-

Source: BC Stats; Statistics Canada, Provincial Economic Accounts, Catalogue 13-213

Standard of Living: Real Personal Disposable Income per Capita (in 1997 Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank by Province	1-Year Check	Period Progress Rank
BC	**19,517**	**19,311**	**19,059**	**18,852**	**18,866**	**18,489**	**18,485**	**18,378**	**18,604**	**19,029**	**3**	**7**	**10**
AB	19,249	19,165	19,338	18,838	19,074	18,924	19,601	20,220	20,043	20,802	2	1	7
SK	15,945	15,562	15,861	15,420	16,192	16,866	15,744	16,298	16,716	17,251	8	2	6
MB	17,782	17,755	17,341	17,243	17,379	17,623	17,236	17,921	18,065	18,610	4	3	8
ON	20,493	20,399	19,890	19,651	19,785	19,349	19,644	19,996	20,702	21,251	1	5	9
QB	16,411	16,380	16,459	16,594	16,930	16,907	16,848	17,059	17,514	17,938	5	6	4
NB	15,335	15,614	15,683	15,658	16,124	16,046	16,010	16,516	17,148	17,519	7	8	1
NS	16,287	16,540	16,565	16,377	16,607	16,294	16,471	17,033	17,568	17,835	6	10	3
PE	15,307	15,526	15,991	15,832	16,013	15,476	15,520	15,845	16,376	16,633	9	9	5
NF	14,204	14,399	14,451	14,534	14,775	14,582	14,415	15,095	15,648	16,119	10	4	2
CAN	18,559	18,483	18,312	18,157	18,389	18,165	18,286	18,620	19,082	19,606	-	-	-

Source: BC Stats; Statistics Canada, Provincial Economic Accounts, Catalogue 13-213

Jobs: Employment Rate (Employment to Population Ratio, Age 15 to 64)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**69.9**	**70.0**	**70.0**	**70.8**	**70.6**	**69.6**	**69.7**	**68.6**	**69.4**	**70.2**	**5**	**6**	**10**
AB	73.7	72.3	72.0	73.3	74.2	74.9	75.8	76.5	76.3	76.7	1	9	5
SK	72.7	71.8	71.9	72.5	72.6	72.1	73.5	74.0	74.1	74.5	3	8	8
MB	71.7	71.2	71.5	71.8	73.2	72.9	73.6	74.7	75.1	76.0	2	5	3
ON	70.7	68.9	68.4	68.5	68.9	68.8	69.5	70.8	72.2	73.3	4	3	6
QB	63.6	62.1	61.7	62.6	63.2	62.7	63.3	64.7	66.0	67.3	7	2	4
NB	59.3	59.4	60.0	59.6	61.2	60.3	61.0	62.3	64.1	64.8	9	7	2
NS	63.4	61.2	60.4	61.0	61.4	61.1	61.7	63.8	64.8	65.8	8	4	7
PE	63.3	62.5	62.7	63.3	64.5	65.4	65.1	66.1	66.2	68.9	6	1	1
NF	51.9	48.7	48.2	48.4	49.4	47.8	48.8	50.5	53.6	53.3	10	10	9
CAN	68.2	66.8	66.5	67.1	67.6	67.3	68.0	68.9	70.1	71.1	-	-	-

Source: BC Stats, Statistics Canada, Labour Force Survey

Average Hourly Earnings ($)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**16.44**	**17.21**	**17.51**	**17.99**	**18.58**	**18.97**	**19.33**	**19.71**	**19.91**	**19.77**	**2**	**10**	**2**
AB	15.49	16.27	16.44	16.20	16.30	16.79	17.33	18.31	18.50	18.63	3	8	1
SK	14.23	14.70	14.75	14.97	15.13	15.01	15.41	16.16	16.34	16.73	7	4	4
MB	14.99	15.50	15.44	15.49	15.71	15.79	15.99	16.47	16.55	16.98	6	3	5
ON	16.97	18.00	18.08	18.32	18.66	18.89	19.23	19.49	19.71	20.06	1	7	3
QB	16.47	17.30	17.19	16.92	17.24	17.48	17.74	18.12	17.73	18.13	4	5	8
NB	14.79	15.12	15.35	15.05	15.40	15.39	15.72	15.86	16.04	16.47	8	2	6
NS	15.04	15.67	15.74	15.63	15.54	15.65	15.76	16.14	16.05	16.37	9	6	10
PE	13.24	13.93	14.20	14.03	14.13	14.53	14.48	14.79	14.55	14.63	10	9	7
NF	15.53	16.42	16.96	16.88	16.75	16.51	16.36	16.66	16.51	17.00	5	1	9
CAN	16.33	17.20	17.25	17.34	17.61	17.87	18.22	18.64	18.68	18.94	-	-	-

Source: BC Stats; Labour Force Historical Review

Productivity (Real GDP at Factor Cost per Hour Worked – Business Sector)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**28.07**	**28.39**	**28.70**	**28.98**	**29.47**	**29.16**	**29.38**	**29.74**	**30.31**	**30.72**	**5**	**4**	**8**
AB	32.03	32.82	34.72	35.58	35.54	35.17	36.83	37.37	37.55	37.78	1	7	4
SK	25.56	25.37	26.71	28.33	28.48	29.64	30.98	31.76	32.16	32.84	3	2	2
MB	24.61	25.59	25.32	25.89	25.44	26.45	27.03	27.79	28.08	27.85	7	9	6
ON	29.18	30.51	30.40	31.45	32.37	31.77	32.46	33.12	34.71	35.12	2	6	3
QB	27.56	28.51	28.99	28.90	29.15	29.92	30.05	30.83	31.47	31.93	4	3	5
NB	23.87	23.87	23.53	23.97	23.93	24.35	24.14	24.95	24.96	24.95	8	8	10
NS	21.22	21.84	22.53	22.45	22.26	21.83	22.78	22.80	23.68	23.98	9	5	7
PE	18.44	19.45	19.48	19.56	20.18	19.67	19.32	19.93	20.53	19.53	10	10	9
NF	21.79	22.71	23.78	24.97	25.00	24.37	24.76	26.60	26.77	28.45	6	1	1
CAN	28.19	29.24	29.61	30.24	30.71	30.67	31.30	31.94	32.86	33.28	-	-	-

Source: BC Stats

Total Exports Per Capita (in 1997 dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**11,422**	**11,435**	**11,576**	**11,959**	**12,330**	**12,178**	**12,549**	**12,856**	**13,592**	**14,432**	**7**	**4**	**10**
AB	16,065	17,073	17,938	19,019	19,695	21,247	22,192	22,810	22,669	23,608	2	7	9
SK	12,660	13,351	13,905	15,970	15,906	16,651	18,816	19,255	19,339	21,145	3	2	4
MB	10,918	11,488	11,543	12,725	13,189	13,870	15,589	16,604	17,139	17,205	5	10	6
ON	15,190	15,614	16,726	18,271	19,535	20,346	21,562	22,894	25,170	26,321	1	6	2
QB	10,511	10,586	11,285	12,250	12,793	13,020	14,122	14,986	16,252	17,568	4	3	5
NB	10,839	11,842	12,405	13,265	14,193	14,598	14,989	15,723	16,772	16,916	6	9	7
NS	7,887	8,242	8,444	8,433	8,581	9,323	10,027	10,158	11,269	11,956	10	5	8
PE	7,528	8,825	8,878	8,744	8,992	9,289	10,091	11,607	12,223	12,646	9	8	3
NF	6,452	5,614	5,917	6,419	7,446	7,458	8,075	9,773	11,276	12,686	8	1	1
CAN	12,806	13,167	13,891	15,012	15,809	16,395	17,454	18,400	19,792	20,889	-	-	-

Source: BC Stats; Statistics Canada, Provincial Economic Accounts - Catalogue 13-213

Taxpayer Supported Debt as a Percent of GDP

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	Rank By Province	1-Year Check	Period Progress Rank
BC	**15.3**	**18.3**	**19.2**	**19**	**18.9**	**19.5**	**19.5**	**20.3**	**21.2**	**19.5**	**2**	**5**	**6**
AB	23.6	27.2	28	24.5	22.4	18.1	14.1	13.3	10.7	7.9	1	1	1
SK	55.4	52.9	50	41.6	39	32.3	30.2	29.4	26.9	24.2	4	3	2
MB	24.3	27.8	30.2	30.8	27.6	25.6	24.6	24.1	23.3	22.1	3	8	3
ON	18.9	24.1	27.2	29.4	31.1	32.4	31.6	30.8	28.7	25.6	5	2	8
QB	21.1	24.8	27.9	33.9	34.8	36	43.9	42.5	40.3	37.2	8	6	9
NB	26.4	37.8	39.6	38.6	35.8	34.9	34.3	33.9	37	33.7	7	4	7
NS	39.6	44.2	48.4	49.4	45.3	44.4	44.2	47	50.1	47.6	10	9	5
PE	12	15.1	31.4	39.4	37	35.2	36.1	34.7	34.2	32.2	6	7	10
NF	47.1	50.6	54.2	54.4	51.9	49.4	46.2	47.1	45.1	44	9	10	4
CAN	21.8	25.8	28.3	28.9	29	27.7	26.9	26.9	26.8	25.2	-	-	-

Source: Toronto Dominion Bank; Report on Canadian Government Finances, October 12, 2001

Per Capita Tax Burden - Consolidated Provincial and Local ($)

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	Rank By Province	1-Year Check	Period Progress Rank
BC	**4,012**	**4,128**	**4,678**	**4,774**	**4,868**	**4,926**	**4,872**	**4,826**	**4,935**	**5,054**	**7**	**6**	**3**
AB	3,787	3,694	3,824	4,081	4,094	4,233	4,584	4,708	4,700	4,735	5	2	1
SK	3,763	3,972	4,142	4,254	4,607	4,649	5,083	5,127	5,435	5,320	8	1	10
MB	3,795	3,798	4,017	4,124	4,342	4,453	4,576	5,012	4,989	5,045	6	3	7
ON	4,810	4,785	4,963	5,142	5,413	5,548	5,744	5,843	6,094	6,341	9	7	6
QB	5,141	5,186	5,214	5,335	5,566	5,644	5,896	6,361	6,683	7,005	10	9	8
NB	3,093	2,995	3,302	3,445	3,589	3,816	3,601	3,504	3,793	3,980	3	10	5
NS	3,234	3,106	3,236	3,317	3,375	3,551	3,585	3,688	3,940	4,103	4	8	4
PE	2,783	2,727	3,058	3,057	3,289	3,399	3,462	3,517	3,823	3,868	2	4	9
NF	3,020	3,033	3,092	3,277	3,530	3,582	3,328	3,472	3,720	3,779	1	5	2
CAN	4,476	4,484	4,667	4,819	5,024	5,133	5,306	5,482	5,699	5,902	-	-	-

Source: BC Stats; Statistics Canada Public Institutions Division. Financial Management System Data.

Top Marginal Personal Income Tax Rate (%)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Rank By Province	1-Year Check	Period Progress Rank
BC	**49.9**	**51.1**	**54.2**	**54.2**	**54.2**	**54.2**	**54.2**	**52.3**	**51.3**	**45.7**	3	**1**	**4**
AB	46.7	46.1	46.1	46.1	46.1	46.1	45.6	45.2	43.7	39.0	1	2	1
SK	52.4	52.0	52.0	52.0	52.0	52.0	51.6	50.8	49.7	45.0	2	3	2
MB	50.8	50.4	50.4	50.4	50.4	50.4	50.1	49.0	48.1	46.4	4	7	3
ON	49.8	50.5	53.2	53.2	52.9	51.6	50.3	48.8	47.9	46.4	4	8	6
QB	51.0	52.9	52.9	52.9	52.9	52.9	52.6	52.2	50.7	48.7	10	6	9
NB	50.5	50.7	51.4	51.4	51.4	51.1	50.4	49.7	48.8	46.8	6	5	5
NS	50.7	50.3	53.8	50.3	50.3	50.0	49.7	49.2	48.8	47.3	7	9	8
PE	50.7	50.3	50.3	50.3	50.3	50.3	50.3	49.6	48.8	47.4	8	10	7
NF	50.5	51.3	51.3	51.3	53.3	53.3	53.3	52.9	51.3	48.6	9	4	10
CAN	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: BC Government; Ministry of Finance (Economic and Fiscal Update, Table 3.3)

Provincial Deficit/Surplus Levels (Percent of GDP)

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	Rank By Province	1-Year Check	Period Progress Rank
BC	**-2.9**	**-1.7**	**-1**	**-0.2**	**-0.3**	**-0.7**	**-0.4**	**-0.9**	**0**	**1.2**	**3**	**5**	**4**
AB	-3.6	-4.6	-1.7	1.1	1.2	2.6	2.5	1	2.5	4.9	1	2	1
SK	-4	-2.8	-1.2	0.5	0.1	1.4	0.1	0.1	0.3	2.5	2	3	2
MB	-1.2	-1.4	-2.3	-1.7	-0.8	0.6	0.3	0.3	0.1	0.1	8	9	10
ON	-3.9	-4.4	-3.8	-3.3	-2.7	-2	-1.1	-0.5	0.2	0.8	5	6	3
QB	-2.7	-3.2	-3	-3.4	-2.2	-1.8	-1.2	0.1	0	0.2	7	8	7
NB	-2.6	-1.9	-1.8	-0.5	0.2	0.4	0.2	-1	0	0.4	6	7	6
NS	-2.3	-3.4	-3	-1.3	-1	-0.6	-0.6	-1.8	-3.5	-0.8	10	1	9
PE	-2.2	-3.5	-2.9	-0.1	0.2	-0.1	-0.3	0.2	-0.2	-0.2	9	9	8
NF	-2.9	-2.7	-2.1	-1.2	0.1	-0.2	-0.1	0	-0.2	1.2	3	4	4
CAN	-3.3	-3.5	-2.8	-2	-1.5	-1	-0.5	-0.3	0.3	0.3	-	-	-

Source: Toronto Dominion Bank; Report on Canadian Government Finances, October 12, 2001, & September 6, 2000

Net Inter-Provincial Migration (per 1,000 Population)

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	Rank By Province	1-Year Check	Period Progress Rank
BC	**11.27**	**11.55**	**10.60**	**7.96**	**5.82**	**2.55**	**-2.53**	**-3.62**	**-3.63**	**-3.13**	**8**	**3**	**8**
AB	1.15	-0.45	-0.61	-0.21	2.79	9.45	15.19	8.67	7.66	8.56	1	4	1
SK	-8.46	-6.32	-5.39	-3.62	-2.13	-2.74	-1.90	-4.23	-7.75	-10.23	10	9	6
MB	-6.89	-4.98	-4.13	-2.87	-3.16	-5.18	-4.64	-1.86	-3.03	-2.70	7	5	5
ON	-1.06	-1.34	-0.88	-0.26	-0.26	0.18	0.82	1.47	1.94	1.53	2	7	2
QB	-1.78	-1.18	-1.22	-1.24	-1.74	-2.40	-2.32	-1.78	-1.65	-1.60	6	6	4
NB	-0.34	-1.87	-0.90	-1.08	-0.49	-1.68	-4.23	-1.65	-1.57	-0.11	4	1	9
NS	0.33	0.10	-2.04	-2.96	-1.34	-1.77	-2.75	0.21	-0.29	-0.88	5	10	10
PE	-1.82	5.00	4.70	2.61	4.73	1.00	-3.04	1.41	0.76	0.51	3	8	3
NF	-2.88	-5.31	-8.54	-12.13	-13.09	-14.51	-17.13	-10.44	-7.88	-6.59	9	2	7
CAN	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: BC Stats; Statistics Canada, Annual Demographic Statistics, Catalogue 91-213 XPE

Gross Fixed Business Investment (Percent of GDP in 1997 dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**18.28**	**18.44**	**17.80**	**19.00**	**17.70**	**16.87**	**18.59**	**16.87**	**16.66**	**17.19**	**6**	**4**	**10**
AB	18.61	18.26	19.38	21.78	21.29	21.77	26.61	27.92	26.40	29.33	1	1	1
SK	17.49	16.45	15.00	15.97	17.27	19.34	24.82	20.80	21.12	19.73	3	8	7
MB	12.25	11.65	12.28	11.97	12.70	14.10	16.01	15.46	15.54	15.65	10	6	5
ON	14.81	14.86	13.31	13.18	12.64	13.94	15.68	15.58	16.02	16.29	8	5	8
QB	15.40	14.66	14.20	13.91	12.55	13.47	14.22	14.45	15.40	15.92	9	3	9
NB	14.19	13.26	11.91	11.40	12.01	13.05	12.83	14.85	18.63	18.21	5	7	4
NS	15.74	12.41	11.88	12.81	12.19	13.39	17.56	18.81	22.53	19.23	4	10	3
PE	16.27	11.30	12.25	15.89	17.01	17.86	13.21	13.19	15.50	16.75	7	2	6
NF	17.67	17.93	21.14	24.20	24.64	20.75	24.05	21.82	26.24	23.26	2	9	2
CAN	15.90	15.56	14.88	15.28	14.62	15.42	17.48	17.34	17.67	18.18	-	-	-

Source: BC Stats; Statistics Canada, Provincial Economic Accounts - Catalogue 13-213

Secondary School Graduates (Per 1,000 Population Aged 18 Years)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Rank By Province	1-Year Check	Period Progress Rank
BC	**607**	**621**	**658**	**652**	**636**	**660**	**675**	**670**	**714**	**736**	**9**	**1**	**3**
AB	607	619	645	663	627	650	644	640	631	632	10	6	8
SK	762	734	736	755	751	735	712	744	732	749	7	2	10
MB	721	733	775	788	748	762	753	765	760	742	8	9	9
ON	684	703	739	752	753	753	738	756	755	769	6	4	5
QB	619	655	703	690	684	873	910	851	802	809	3	5	1
NB	794	795	832	828	846	828	844	846	826	843	1	3	7
NS	689	674	703	706	735	750	742	795	803	798	4	7	4
PE	749	749	744	775	808	804	805	779	871	818	2	10	6
NF	657	661	713	721	778	758	802	782	809	796	5	8	2
CAN	659	676	713	717	711	762	766	760	752	761	-	-	-

Source: BC Stats; Statistics Canada (Catalogue 81-229)

University Completion (Percent of Population Age 25 to 54)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**18.8**	**20.0**	**21.6**	**23.5**	**23.3**	**24.1**	**24.0**	**25.4**	**26.4**	**27.7**	**2**	**4**	**2**
AB	20.0	21.3	22.3	23.1	21.8	21.9	23.2	23.0	23.9	23.6	6	8	10
SK	15.6	15.7	17.4	17.2	18.2	19.1	18.8	19.9	20.7	21.5	7	5	4
MB	19.0	19.4	20.3	20.2	20.8	21.4	22.9	23.5	23.5	25.5	3	1	7
ON	23.3	23.9	25.0	26.5	26.0	26.3	27.0	27.2	28.8	30.9	1	3	8
QB	16.1	18.2	19.5	19.6	21.2	21.7	23.1	23.4	24.5	25.1	4	7	1
NB	14.0	15.6	16.1	16.5	17.3	17.7	17.7	18.7	20.0	19.2	8	9	5
NS	20.2	19.2	22.1	22.3	21.1	21.6	21.6	22.7	22.9	24.6	5	2	9
PE	14.0	15.9	19.0	17.2	19.6	18.3	19.9	20.1	20.3	19.2	9	10	3
NF	11.3	11.9	13.3	12.9	13.8	12.8	13.4	14.5	14.9	15.3	10	6	6
CAN	19.5	20.6	21.9	22.8	23.0	23.4	24.2	24.7	25.9	27.1	-	-	-

Source: BC Stats; Statistics Canada, Labour Force Survey

Research and Development (Percent of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Rank By Province	1-Year Check	Period Progress Rank
BC	**0.97**	**0.95**	**1.00**	**0.97**	**1.06**	**1.01**	**0.93**	**0.92**	**0.87**	**6**	**9**	**6**
AB	1.07	1.08	1.04	1.02	1.09	1.05	1.00	0.97	1.02	4	1	3
SK	0.96	1.02	1.11	1.01	0.97	0.95	0.80	0.97	0.87	7	10	4
MB	1.09	1.18	1.15	1.20	1.19	1.10	1.02	0.91	0.86	8	8	8
ON	1.81	1.88	1.95	2.07	2.15	2.12	2.08	2.11	2.12	1	3	2
QB	1.69	1.84	1.98	2.04	2.07	2.09	2.11	2.10	2.05	2	5	1
NB	0.99	0.88	0.87	0.88	0.88	0.86	0.90	0.73	0.72	9	6	10
NS	1.38	1.36	1.28	1.33	1.42	1.37	1.32	1.25	1.26	3	2	5
PE	0.78	0.71	0.64	0.69	0.67	0.60	0.57	0.61	0.60	10	4	9
NF	1.10	1.10	1.15	1.13	1.05	0.94	0.98	0.96	0.93	5	7	7
CAN	1.51	1.57	1.62	1.67	1.73	1.70	1.66	1.67	1.66	-	-	-

Source: BC Stats; Statistics Canada

Natural and Applied Sciences and Related Occupations (Percent of Employment)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**4.82**	**4.31**	**4.59**	**4.67**	**4.68**	**5.04**	**5.06**	**5.37**	**6.23**	**6.26**	**4**	**6**	**3**
AB	5.63	5.37	5.75	5.42	5.19	5.40	6.05	6.14	6.84	6.54	3	9	8
SK	3.04	2.68	2.84	2.94	3.11	2.86	3.51	3.23	3.58	3.44	10	8	7
MB	3.75	3.88	4.03	3.69	3.80	3.86	4.26	4.24	4.66	4.96	6	1	2
ON	5.29	5.12	4.96	4.96	5.30	5.22	5.58	5.95	6.81	7.20	1	2	1
QB	5.28	5.04	5.14	5.31	5.13	4.99	5.72	5.97	6.23	6.56	2	3	5
NB	4.42	4.21	3.85	4.10	3.87	4.25	4.12	4.19	5.09	4.93	7	7	10
NS	4.28	4.27	4.65	4.37	4.46	4.39	4.09	4.86	4.75	4.89	8	5	9
PE	3.75	3.55	4.78	3.61	3.32	4.41	3.72	4.47	4.73	4.19	9	10	4
NF	4.20	4.50	4.85	4.11	4.01	4.22	4.60	4.84	4.93	5.13	5	4	6
CAN	5.05	4.82	4.89	4.87	4.95	4.96	5.37	5.65	6.28	6.49	-	-	-

Source: BC Stats; Statistics Canada, Labour Force Survey

Environment, Health & Society

Environmental Quality

	Air Quality (2000)	GHG Per Capita (1999)	Wastewater Treatment (1999)	Protected Areas (2000)	Rank By Province	1-Year Check	Period Progress Rank
BC	**2**	**3**	**5**	**1**	**1**	**n/a**	**n/a**
AB	7	2	2	2	4	n/a	n/a
SK	5	1	1	6	4	n/a	n/a
MB	4	3	3	4	3	n/a	n/a
ON	3	4	4	3	2	n/a	n/a
QB	6	7	7	8	7	n/a	n/a
NB	4	6	6	10	9	n/a	n/a
NS	n/a	8	8	5	8	n/a	n/a
PE	1	9	9	9	4	n/a	n/a
NF	n/a	10	10	7	9	n/a	n/a
CAN	-	-	-	-	-	-	-

Source: BC Progress Board

Life Expectancy at Birth (Years, Both Sexes)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Rank By Province	1-Year Check	Period Progress Rank
BC	**78.1**	**78.4**	**78.6**	**78.4**	**78.6**	**79.1**	**78.9**	**79.3**	**79.5**	**1**	**4**	**1**
AB	78.0	78.1	78.3	78.3	78.4	78.6	78.5	79.0	79.1	3	5	5
SK	78.1	78.2	79.0	78.6	78.5	78.3	78.3	78.6	78.5	4	7	10
MB	77.5	77.6	78.0	77.7	77.9	77.7	78.0	78.1	78.0	6	8	9
ON	77.9	77.9	78.2	78.2	78.3	78.5	78.6	79.0	79.2	2	3	3
QB	77.1	77.4	77.8	77.5	77.9	78.0	78.1	78.0	78.4	5	2	2
NB	77.4	77.7	77.7	77.5	77.7	77.9	78.1	78.2	78.0	6	9	8
NS	76.7	77.3	77.1	77.5	77.4	77.9	77.7	77.8	77.8	8	6	6
PE	76.8	76.7	77.7	77.2	78.1	77.8	77.2	79.4	77.5	9	10	7
NF	76.2	76.8	77.0	77.0	76.9	77.5	77.5	77.0	77.4	10	1	4
CAN	77.6	77.8	78.1	78.0	78.1	78.4	78.4	78.6	78.8	-	-	-

Source: 1990-1995, BC Stats; 1996-1998 Statistics Canada, The Daily - May 13, 1999 and May 23, 2001

Low Income Incidence (Percent of Families and Unattached Individuals Below the After Tax Low Income Cut Off)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Rank By Province	1-Year Check	Period Progress Rank
BC	**13.6**	**16.6**	**15.5**	**17.2**	**17.1**	**15.9**	**17.7**	**17.3**	**14.9**	**16.1**	**6**	**8**	**7**
AB	15.8	16.3	19.5	18.4	16.3	16.1	16.8	17.1	15.8	15.3	5	6	2
SK	14.0	15.0	16.0	14.6	13.8	13.3	15.8	14.1	13.4	12.6	2	3	1
MB	17.2	20.4	19.5	18.5	18.3	16.2	20.1	19.5	18.2	16.9	8	2	5
ON	11.5	13.4	13.1	14.7	12.9	14.5	15.2	14.5	13.2	13.1	4	7	6
QB	19.7	20.5	18.8	20.2	20.9	20.8	22.8	22.1	20.9	19.9	10	5	4
NB	13.0	12.3	13.1	13.2	15.3	13.3	13.9	14.9	13.7	12.9	3	4	3
NS	10.9	12.4	15	14.4	15.9	16.6	17.4	17.6	18.3	16.3	7	1	10
PE	9.2	12.1	9.9	8.2	9.2	10.5	13.2	12.7	11.2	12.3	1	10	9
NF	13.2	14.2	16.7	16.2	15.6	17.7	16.2	16.1	16.7	18.2	9	9	8
CAN	14.7	16.2	15.9	16.9	16.2	16.6	17.9	17.4	16.1	15.8	-	-	-

Source: BC Stats; Statistics Canada, Income Trends in Canada, 1980 - 1998, Cat No 13F0022XCB

Air Quality (Annual Mean PM10 Concentrations (ug/m^3))

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
Vancouver				**15**	**15**	**14**	**14**	**14**	**13**	**14**	**2**	**n/a**	**n/a**
Edmonton	24	24	24	26	21	20	24	31	28	25	7	n/a	n/a
Regina	20	21	17	19	17	18	22	24	20	20	5	n/a	n/a
Winnipeg				24	24	22	22	22	21	19	4	n/a	n/a
Toronto							19	20	20	18	3	n/a	n/a
Montreal							25	26	23	22	6	n/a	n/a
Saint John			14			15	18	20	29	19	4	n/a	n/a
Charlottetown							9		14	12	1	n/a	n/a

Source: Ministry of Water, Land and Air Protection, 2001, Air Resources Branch

Greenhouse Gas Emissions (Tonnes Emitted per Capita)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Rank By Province	1-Year Check	Period Progress Rank
BC	**16.824**	**16.407**	**14.841**	**15.218**	**15.419**	**16.105**	**16.023**	**15.355**	**15.435**	**15.764**	**3**	**9**	**2**
AB	69.144	68.607	68.007	68.876	71.439	72.308	73.006	71.902	70.863	72.312	10	8	7
SK	47.036	46.369	49.702	52.434	55.523	56.659	58.852	59.491	59.616	59.667	9	7	10
MB	18.641	18.183	18.074	17.525	17.884	17.681	18.954	18.124	18.543	18.292	6	3	5
ON	18.565	18.150	17.284	16.181	16.275	16.310	16.936	17.245	17.038	16.931	5	4	1
QB	12.721	11.756	11.283	11.535	11.936	11.671	11.795	11.790	12.016	12.015	1	6	3
NB	22.004	21.028	21.248	20.119	22.040	22.231	22.045	25.192	26.414	25.189	8	2	9
NS	21.674	21.421	21.415	21.281	20.666	20.260	20.511	21.081	21.045	21.614	7	10	6
PE	14.843	14.558	14.818	14.414	14.339	13.791	14.758	14.901	14.609	14.535	2	5	4
NF	16.483	14.313	13.918	14.122	12.663	14.377	14.877	15.972	18.885	16.568	4	1	8
CAN	22.790	22.170	21.534	21.351	21.868	22.052	22.581	22.641	22.714	22.829	-	-	-

Source: Ministry of Water, Land and Air Protection, 2001, Air Resources Branch

Wastewater Treatment (Percent Treated at Secondary or Better Facilities)

	1991	1994	1996	1999	Rank By Province	1-Year Check	Period Progress Rank
BC	**30.00**	**31.00**	**30.00**	**63.00**	**5**	**n/a**	**1**
AB	99.61	99.52	99.78	99.33	2	n/a	8
SK	65.18	64.13	94.67	99.65	1	n/a	2
MB	97.97	97.80	97.83	98.26	3	n/a	7
ON	86.81	93.63	94.20	94.38	4	n/a	6
QB	36.11	43.55	46.61	53.86	7	n/a	3
NB	69.78	64.75	66.04	62.00	6	n/a	10
NS	29.11	30.65	36.63	38.90	8	n/a	4
PE	17.72	17.72	26.36	19.77	9	n/a	5
NF	7.94	6.55	12.21	3.61	10	n/a	9
CAN	-	-	-	-	-	-	-

Source: Ministry of Water, Land and Air Protection; Environment Canada, MUD Database, 2001

Protected Areas (Percent of Land Base Protected)

	2001	Rank By Province	1-Year Check	Period Progress Rank
BC	**13.1**	**1**	**n/a**	**n/a**
AB	12.5	2	n/a	n/a
SK	6.4	6	n/a	n/a
MB	8.4	4	n/a	n/a
ON	8.7	3	n/a	n/a
QB	4.3	8	n/a	n/a
NB	3.2	10	n/a	n/a
NS	8.3	5	n/a	n/a
PE	4.2	9	n/a	n/a
NF	4.5	7	n/a	n/a
CAN	7.3	-	-	-

Source: BC Ministry of Water, Land and Air Protection; Ministry of Sustainable Resource Management, 2001.

Cancer Mortality (Deaths per 100,000 Population)

	1990	1991	1992	1993	1994	1995	1996	1997	Rank By Province	1-Year Check	Period Progress Rank
BC	**175.9**	**174.3**	**170.1**	**173.6**	**172.9**	**168.2**	**168.7**	**167.9**	**3**	**9**	**4**
AB	174.3	174.4	176.6	176.9	169.7	173.6	176.5	167.8	2	3	7
SK	174.1	171.8	164.8	169.9	175.7	171.8	173.1	166.2	1	4	5
MB	190.1	183.4	189.8	189.6	185.9	191.5	187.2	183.2	6	6	8
ON	187.3	188.8	187.2	186.7	189.1	185.5	183.6	174.4	5	2	2
QB	213.6	215.8	212.5	212.3	209.2	205.5	209.5	203.3	9	5	3
NB	197.6	195.5	196.8	198.3	196.6	201.8	195.4	193.2	7	8	9
NS	216.7	212.4	215.6	214.9	213.9	207.1	212.3	208.7	10	7	6
PE	212.8	208.4	204.8	181.5	208.7	200.3	209.1	172.0	4	1	1
NF	194.9	190.6	198.8	197.4	198.8	192.2	192.3	194.5	8	10	10
CAN	192.3	192.5	191.0	191.2	190.8	187.9	188.4	182.0	-	-	-

Source: Statistics Canada, Health Statistics at a Glance, Cat No 82F0075XCB

Low Birth Weight (Percent of Live Births below 2,500 grams)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Rank By Province	1-Year Check	Period Progress Rank
BC	**5.03**	**4.88**	**4.83**	**5.05**	**5.10**	**5.31**	**5.22**	**5.33**	**5.07**	**2**	**2**	**3**
AB	5.89	5.76	5.82	5.66	5.63	5.99	6.08	6.13	6.18	10	8	6
SK	4.90	5.07	4.87	5.17	5.34	5.58	5.00	5.22	5.18	3	7	7
MB	5.48	5.37	5.05	5.37	5.29	5.50	5.46	5.59	5.54	6	6	5
ON	5.38	5.67	5.57	5.98	5.98	6.45	5.97	5.87	5.80	8	5	8
QB	6.00	5.88	5.70	5.70	5.93	5.96	5.86	5.91	6.08	9	10	4
NB	5.02	5.56	5.40	5.54	5.92	4.78	5.12	5.33	5.38	4	9	9
NS	5.88	5.72	5.59	5.85	5.52	5.96	5.41	5.81	5.56	7	3	1
PE	4.72	4.52	5.20	4.05	6.07	4.63	5.32	5.11	4.92	1	4	10
NF	n/a	5.61	5.62	5.73	6.25	5.50	6.07	5.86	5.54	5	1	2
CAN	5.54	5.59	5.49	5.68	5.77	6.00	5.76	5.78	5.76	-	-	-

Source: BC Stats; Statistics Canada, Health Statistics at a Glance, Cat No 82F0075XCB and Births, Shelf Tables 1998, Cat No 84F0210XPB

Personal and Property Crime (Incidents per 100,000 Population)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Rank By Province	1-Year Check	Period Progress Rank
BC	**10414**	**10351**	**10025**	**9812**	**9964**	**10089**	**9162**	**8549**	**8048**	**7619**	**10**	**3**	**5**
AB	8895	8304	7400	6465	6204	6106	6119	6050	5852	5492	7	2	1
SK	7454	7510	7158	7075	7428	7646	7770	7677	7360	7545	9	10	10
MB	7737	7508	7819	7979	7546	7483	7189	6774	6662	6616	8	7	9
ON	6683	6414	6248	5922	5968	5714	5168	4783	4423	4265	4	4	2
QB	6320	6131	5605	5150	5062	5235	4969	4729	4386	4365	5	8	3
NB	4545	4455	4537	4244	4227	4267	3923	3954	3943	3820	3	5	8
NS	6265	5917	5423	5193	5172	5204	5174	5034	5020	4566	6	1	4
PE	4933	5099	4695	4204	4420	4373	3912	3464	3809	3714	2	6	7
NF	4455	4240	3798	3718	3537	3738	3564	3551	3332	3321	1	9	6
CAN	7220	6986	6652	6297	6290	6264	5857	5534	5218	5049	-	-	-

Source: BC Stats; Statistics Canada - CANSIM II

Supplemental Information: US Comparisons

Economic Growth A: Real GDP per Capita (In 1997 Canadian Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
QB	23581	23584	23813	24620	24954	25178	25951	26758	28045
ON	29036	28883	28905	30243	30965	30908	32002	33146	35167
AB	31472	31653	33343	34938	35519	35842	37776	38522	38549
BC	28521	28312	28630	28656	28478	28538	28940	29147	29747
CF	36109	35279	34653	34906	35841	36669	38209	40090	42698
OR	27491	27637	28418	29242	30410	33621	34970	36801	38563
WA	33555	33783	33891	34329	33902	35043	36609	38741	41016

Source: The Centre for Spatial Economics; Bureau of Economic Analysis

Economic Growth B: Growth of Real GDP Per Capita (Percent Change Over Previous Year)

	1992	1993	1994	1995	1996	1997	1998	1999
QB	0.01	0.97	3.39	1.36	0.90	3.07	3.11	4.81
ON	-0.53	0.08	4.63	2.39	-0.18	3.54	3.57	6.10
AB	0.58	5.34	4.78	1.66	0.91	5.40	1.97	0.07
BC	-0.73	1.12	0.09	-0.62	0.21	1.41	0.72	2.06
CF	-2.30	-1.77	0.73	2.68	2.31	4.20	4.92	6.51
OR	0.53	2.83	2.90	3.99	10.56	4.01	5.24	4.79
WA	0.68	0.32	1.29	-1.24	3.36	4.47	5.82	5.87

Source: The Centre for Spatial Economics; Bureau of Economic Analysis

Standard of Living: Real Personal Disposable Income Per Capita (In 1997 Canadian Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
QB	16,411	16,380	16,459	16,594	16,930	16,907	16,848	17,059	17,514	17,938
ON	20,493	20,399	19,890	19,651	19,785	19,349	19,644	19,996	20,702	21,251
AB	19,249	19,165	19,338	18,838	19,074	18,924	19,601	20,220	20,043	20,802
BC	19,517	19,311	19,059	18,852	18,866	18,489	18,485	18,378	18,604	19,029
CF	25,760	25,211	25,519	25,338	25,418	25,838	26,035	26,348	27,075	27,016
OR	23,260	22,751	22,770	22,798	23,249	23,723	23,656	24,139	24,399	24,276
WA	25,604	25,845	26,338	26,044	25,929	25,772	26,085	26,591	27,553	27,874

Source: The Centre for Spatial Economics; Bureau of Economic Analysis and US Census Bureau

Jobs: Employment Rate (Percent of Population, Age 16 and Older)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
QB	55.3	54.0	53.6	54.2	54.6	54.2	54.6	55.7	56.6
ON	61.0	59.2	58.9	58.9	59.1	58.7	59.3	60.3	61.3
AB	65.5	64.3	64.0	64.9	65.4	65.6	65.9	66.7	67.1
BC	58.3	58.2	58.5	59.4	59.0	58.5	59.2	58.6	58.9
CF	60.9	60.1	59.5	60.2	60.4	60.6	61.8	62.3	62.5
OR	63.3	62.5	63.1	65.2	64.6	65.0	64.4	65.2	64.2
WA	62.1	62.5	62.3	62.3	63.2	63.6	65.8	66.0	65.9

Source: The Centre for Spatial Economics; US Bureau of Labour Statistics and US Census Bureau

Average Hourly Earnings PFX (In Canadian Dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
QB	17.30	17.19	16.92	17.24	17.48	17.74	18.12	17.73	18.13
ON	18.00	18.08	18.32	18.66	18.89	19.23	19.49	19.71	20.06
AB	16.27	16.44	16.20	16.30	16.79	17.33	18.31	18.50	18.63
BC	17.21	17.51	17.99	18.58	18.97	19.33	19.71	19.91	19.77
CF	14.82	16.20	17.36	17.97	18.27	19.11	21.05	21.41	21.82
OR	13.91	15.26	16.54	17.12	17.42	18.36	20.35	21.03	21.69
WA	17.00	18.48	20.32	20.63	20.90	21.70	23.96	25.07	25.96

Source: The Centre for Spatial Economics; US Bureau of Labour Statistics

Hourly Labour Productivity (Real GDP per Hour in 1997 Canadian Dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
QB	32.53	32.51	32.46	32.95	33.52	34.15	34.69	34.73
ON	35.63	35.24	36.43	37.42	37.02	37.76	38.32	39.59
AB	35.99	37.89	38.33	38.73	38.13	39.48	40.85	40.49
BC	35.34	35.34	34.84	34.94	35.35	35.73	36.86	37.20
CF	38.78	38.05	37.94	39.30	39.82	40.11	41.83	43.65
OR	29.21	29.82	29.34	31.05	33.95	35.33	36.86	39.12
WA	38.22	38.46	38.19	37.39	38.22	38.21	40.61	42.64

Source: The Centre for Spatial Economics

Unit Labour Costs (In 1997 Canadian Dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
QB	0.3334	0.3376	0.3399	0.3372	0.3350	0.3336	0.3326	0.3337
ON	0.3236	0.3343	0.3318	0.3261	0.3375	0.3379	0.3374	0.3312
AB	0.3017	0.2912	0.2893	0.2857	0.3023	0.3022	0.3000	0.3066
BC	0.3091	0.3162	0.3297	0.3386	0.3416	0.3433	0.3341	0.3345
CF	0.2847	0.3218	0.3466	0.3438	0.3472	0.3645	0.3823	0.3772
OR	0.3486	0.3729	0.4166	0.4045	0.3779	0.3866	0.4106	0.4013
WA	0.3064	0.3311	0.3738	0.3856	0.3838	0.4022	0.4152	0.4179

Source: The Centre for Spatial Economics

Tax Payer Supported Debt (Percent of GDP)

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
QB	21.1	24.8	27.9	33.9	34.8	36.0	43.9	42.5
ON	18.9	24.1	27.2	29.4	31.1	32.4	31.6	30.8
AB	23.6	27.2	28.0	24.5	22.4	18.1	14.1	13.3
BC	15.3	18.3	19.2	19.0	18.9	19.5	19.5	20.3
CF	13.7	14.5	16.0	15.3	14.8	14.9	14.3	13.7
OR	16.4	15.4	14.6	14.1	13.6	13.4	12.9	13.1
WA	21.5	21.7	19.7	22.1	19.6	19.2	18.2	17.8

Source: The Centre for Spatial Economics; US Census Bureau

Per Capita Tax Burden - Consolidated Provincial (State) and Local

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
QB	5,141	5,186	5,214	5,335	5,566	5,644	5,896	6,361
ON	4,810	4,785	4,963	5,142	5,413	5,548	5,744	5,843
AB	3,787	3,694	3,824	4,081	4,094	4,233	4,584	4,708
BC	4,012	4,128	4,678	4,774	4,868	4,926	4,872	4,826
CF	3,056	3,030	3,006	3,033	3,196	3,309	3,488	3,675
OR	2,661	2,723	2,802	2,693	2,641	2,893	2,822	2,939
WA	2,958	3,057	3,229	3,196	3,290	3,420	3,486	3,624

Source: The Centre for Spatial Economics; US Census Bureau

Top Marginal Income Tax Rates (Percent)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
QB	51	52.9	52.9	52.9	52.9	52.9	52.6	52.2	50.7
ON	49.8	50.5	53.2	53.2	52.9	51.6	50.3	48.8	47.9
AB	46.7	46.1	46.1	46.1	46.1	46.1	45.6	45.2	43.7
BC	49.9	51.1	54.2	54.2	54.2	54.2	54.2	52.3	51.3
CF	40.3	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9
OR	40	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
WA	31	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6

Source: The Centre for Spatial Economics; Internal Revenue Service

Net Inter-provincial/Inter-state Migration (Percent of Population)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
QB	-0.19%	-0.18%	-0.12%	-0.12%	-0.12%	-0.17%	-0.24%	-0.23%	-0.18%	-0.17%
ON	-0.11%	-0.11%	-0.13%	-0.09%	-0.03%	-0.03%	0.02%	0.08%	0.15%	0.19%
AB	0.34%	0.12%	-0.04%	-0.06%	-0.02%	0.28%	0.95%	1.52%	0.87%	0.77%
BC	1.04%	1.13%	1.16%	1.06%	0.80%	0.58%	0.25%	-0.25%	-0.36%	-0.36%
CF	-0.06%	-0.50%	-0.69%	-1.24%	-1.38%	-1.21%	-0.80%	-0.46%	-0.28%	-0.24%
OR	0.33%	1.33%	1.10%	1.32%	1.06%	1.04%	1.00%	0.75%	0.46%	0.31%
WA	0.40%	1.24%	1.29%	1.02%	0.62%	0.81%	0.51%	0.65%	0.43%	0.19%

Source: The Centre for Spatial Economics; US Census Bureau

Research and Development (Percent of GDP)

	1993	1994	1995	1996	1997	1998
QB	2.05	2.09	2.10	2.13	2.12	2.09
ON	2.09	2.17	2.14	2.09	2.13	2.15
AB	1.03	1.10	1.06	1.01	0.97	1.03
BC	0.98	1.06	1.02	0.93	0.93	0.88
CF	2.59	2.66	3.10	3.08	3.25	3.16
OR	0.65	0.68	0.91	0.93	1.13	1.44
WA	3.31	3.02	2.84	3.42	3.77	3.90

Source: The Centre for Spatial Economics; National Science Foundation

Air Quality (Annual Mean PM10 Concentrations (ug/m^3)

	1996	1997	1998	1999	2000
Toronto		19	20	20	18
Vancouver	14	14	14	13	14
Montreal		25	28	22	21
Ottawa	19	17	19	17	13
Edmonton	20	24	31	28	25
Los Angeles	47	46	41	56	46
Portland	27	30	29	28	24
Seattle	26	31	26	26	28

Source: The Centre for Spatial Economics; Environmental Protection Agency Air Data Database

Low Birth Weight (Percent of Live Births below 2,500 Grams)

	1993	1994	1995	1996	1997	1998
QB	5.7	5.9	6.0	5.9	5.9	6.1
ON	6.0	6.0	6.5	6.0	5.9	5.8
AB	5.7	5.6	6.0	6.1	6.1	6.2
BC	5.1	5.1	5.3	5.2	5.3	5.1
CF	6.0	6.2	6.1	6.1	6.1	6.2
OR	5.2	5.3	5.5	5.3	5.5	5.4
WA	5.2	5.3	5.5	5.6	5.6	5.7

Source: The Centre for Spatial Economics

Personal and Property Crime (Incidents per 100,000 Population)

	1995	1996	1997	1998	1999	2000
QB	5,062	5,235	4,969	4,729	4,386	4,365
ON	5,968	5,714	5,168	4,763	4,423	4,265
AB	6,204	6,106	6,119	6,050	5,852	5,492
BC	9,964	10,089	9,162	8,549	8,048	7,619
CF	4,986	4,922	4,916	4,343	3,771	4,930
OR	3,704	4,924	4,547	5,647	4,878	4,473
WA	3,466	3,746	4,025	5,867	5,168	4,090

Source: The Centre for Spatial Economics; Federal Bureau of Investigation and the Statistical Abstract of the United States

F. Detailed Tables –Comparison of the Lower Mainland and Regional BC

Economy, Innovation and Education

Jobs: Employment Rate (Employment to Population Ratio, Age 15 to 64)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	72.7	72.8	71.0	71.8	71.3	70.5	69.8	68.7	69.6	71.0
RBC	65.0	65.2	67.1	67.2	67.9	66.8	67.8	66.5	67.0	67.2
BC	69.9	70.0	70.0	70.8	70.6	69.6	69.7	68.6	69.4	70.2

Source: BC Stats, Statistics Canada, Labour Force Survey

Tax Filer's Employment Income (In $ Billions)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Vancouver CMA	21.56	21.55	22.64	25.13	25.78	26.95	28.90	30.16	31.19
RBC	20.26	20.43	21.77	22.00	22.64	23.46	24.76	25.42	25.56
BC	41.82	41.98	44.40	47.14	48.42	50.41	53.65	55.58	56.75

Source: BC Stats; Canada Customs and Revenue Agency

Manufacturing Shipments (In $ Billions)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Vancouver CMA	12.93	12.78	13.06	13.27	15.41	16.88	16.90	17.02	16.73
RBC	12.40	10.48	11.78	13.87	15.64	18.16	17.20	17.56	17.16
BC	25.33	23.26	24.84	27.14	31.05	35.04	34.10	34.58	33.89

Source: BC Stats; Statistics Canada

Retail Sales (In $ Billions)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	11.97	12.66	13.71	15.24	16.98	16.89	17.11	16.92	17.05	18.04
RBC	11.64	11.85	12.85	14.20	14.52	15.19	16.62	16.14	16.64	17.78
BC	23.61	24.51	26.55	29.44	31.50	32.07	33.74	33.05	33.68	35.82

Source: BC Stats; Statistics Canada

Housing Starts (Dwelling Units)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	14,769	18,684	21,307	20,473	14,992	15,453	15,950	11,878	8,677	8,203
RBC	17,106	21,937	21,500	18,935	12,065	12,188	13,401	8,053	7,632	6,215
BC	31,875	40,621	42,807	39,408	27,057	27,641	29,351	19,931	16,309	14,418

Source: BC Stats; CMHC

Non-Residential Building Permits (In $ Billions)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	1.17	1.27	1.01	.96	1.07	1.11	1.17	1.23	1.11	1.25
RBC	.73	.82	.93	.81	.90	.85	.79	.79	.99	.84
BC	1.80	2.08	1.94	1.77	1.97	1.96	1.96	1.02	2.10	2.09

Source: BC Stats; Statistics Canada

High School Graduation Rates (Percent of 18 Year Old Population)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	68.3	69.3	66.7	69.4	71.7	72.4	75.4	78.6	81.0	81.8
RBC	63.3	65.0	63.2	66.8	67.3	66.8	68.5	69.6	72.8	72.4
BC	65.6	67.0	64.9	68.0	69.4	69.5	71.8	73.8	76.6	76.7

Source: BC Stats; Ministry of Education

University Completion (Percent of Population, Age 25 to 54)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	23.2	24.4	27.0	29.4	28.7	29.9	28.3	31.3	31.6	32.8
RBC	14.2	15.4	15.8	17.2	17.4	17.8	19.1	18.5	20.3	21.7
BC	18.8	20.0	21.6	23.5	23.3	24.1	24.0	25.4	26.4	27.7

Source: BC Stats; Statistics Canada, Labour Force Survey

Natural and Applied Sciences and Related Occupations (Percent of Employment)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	5.57	4.48	5.20	5.31	5.16	5.48	5.30	6.05	7.49	6.99
RBC	3.97	4.13	3.94	3.98	4.15	4.55	4.80	4.61	4.82	5.42
BC	4.82	4.31	4.59	4.67	4.68	5.04	5.06	5.37	6.23	6.26

Source: BC Stats; Statistics Canada, Labour Force Survey

New Business Formations (Business Incorporations less Bankruptcies)

	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	17,128	16,174	16,017	15,689	13,983	14,152	14,441
RBC	7,824	6,699	6,272	6,374	5,745	5,780	5,965
BC	24,952	22,873	22,289	22,063	19,728	19,932	20,406

Source: BC Stats; Ministry of Finance and Superintendent of Bankruptcies

Environment, Health and Society

Air Quality (Annual Mean PM10 Concentrations (ug/m^3))

	1994	1995	1996	1997	1998	1999	2000
Vancouver	15	15	14	14	14	13	14
Langley	14	13	12	11	13	12	13
Campbell River				12	12	11	12
Kamloops		18	17	13	15	14	14
Kelowna		17	16	16	17	13	14
Prince George		24	20	20	23	18	18

Source: Ministry of Water, Land and Air Protection, 2001

Wastewater Treatment (Percent Treated at Secondary or Better Facilities)

	1991	1994	1996	1999
Vancouver GVRD & LFV	9	10	10	57
RBC	46	43	42	46

Source: Source: Environment Canada Municipal Water Use Database (MUD), 2001. Ministry of Water, Land and Air Protection, 2001.

Cancer Mortality (Deaths per 100,000 Population, Age 45 and Over)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Vancouver CMA	582.3	569.7	548.5	538.5	528.7	535.0	520.5	506.4	502.7	485.3
RBC	591.6	590.3	574.5	600.4	595.0	553.0	569.1	570.2	548.9	551.0
BC	587.2	580.5	562.1	570.9	563.5	544.5	545.9	540.0	526.9	519.7

Source: BC Stats; BC Vital Statistics Agency

Life Expectancy at Birth (Years)

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Vancouver CMA	78.5	78.7	78.6	78.8	79.0	79.1	79.4	79.7	80.1	80.6
RBC	77.9	78.1	78.2	78.2	78.4	78.5	78.7	78.9	79.3	79.7
BC	78.2	78.4	78.4	78.5	78.7	78.8	79.0	79.3	79.6	80.1

Source: BC Stats

Low Birth Weight (Percent of Live Births below 2,500 Grams)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	4.87	4.86	4.99	5.23	5.51	5.36	5.70	5.24	5.11	5.45
RBC	4.76	4.65	4.98	5.80	5.01	4.88	4.74	4.78	4.35	4.77
BC	4.81	4.75	4.98	5.49	5.26	5.13	5.23	5.02	4.75	5.13

Source: BC Stats; BC Vital Statistics Agency

Personal and Property Crime Rate (per 100,000 Population)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vancouver CMA	11657	11405	10945	10685	11220	11667	10257	9545	9045	8562
RBC	9225	9395	9190	8973	8756	8553	8085	7588	7086	6734
BC	10414	10351	10025	9812	9964	10089	9162	8549	8048	7619

Source: BC Stats, Ministry of Public Security and Solicitor General

Low Income Incidence (Percent of Families and Unattached Individuals Below the After Tax Low Income Cut Off)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Vancouver CMA	16.5	21.4	20.1	22.9	21.1	19.5	21.9	21.6	18.7	19.4
RBC	10.7	11.7	10.9	11.3	13.1	12.5	13.6	13.1	11.4	13.0
BC	13.6	16.6	15.5	17.2	17.1	15.9	17.7	17.3	14.9	16.1

Source: BC Stats; BC Vital Statistics Agency